

Educational Administration and Supervision

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EDUCATIONAL ADMINISTRATION AND SUPERVISION

Volume 45

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Number 1

FOLLOW THROUGH WITH THE FIRST-YEAR TEACHER

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The University of Notre Dame

As one result of the present-day shortage of professionally prepared teachers in the elementary and secondary schools and of the continuing rise in school enrollments, which in the years to come will only accentuate the current seriousness of the problem, a great number of school districts have begun a running appraisal of the resources at their immediate disposal. Those responsible for the administration of the schools, as a consequence of such evaluations, have acknowledged their responsibility for making every effort to retain their present teaching staff and, in carrying out this responsibility, have provided a partial solution to the problem of an inadequate supply of teachers, not only in its nationwide but particularly in its local setting. The National Education Association has called attention to the need for this contribution in the following statement: "One of the most effective ways to meet the teacher shortage is to decrease the annual demand for replacement of the teachers who quit. . . . In truth, increased efforts to retain good teachers can strike a telling blow at the teacher shortage."

Although this responsibility pertains to all teachers, regardless of length of professional service, this article concerns the first-year teacher and is based upon three premises:

(1) The first-year teacher, individually and as a group, constitutes a special segment of the total faculty of a school system.

(2) This first year of teaching is a process of continuous adjustment, extending over the entire year and constituting a series of problems both professional and personal in nature.

¹ NEA Research Division. "The 1956 Teacher Supply and Demand Report." The Journal of Teacher Education. Vol. VII, No. 1, March, 1956. pp. 35-36.

(3) The degree to which the adjustment is satisfactory to the individual first-year teacher (the degree to which he is assisted in the solution of his problems) affects the quality of his service to the school, influences his decision to remain with the school system, and may determine whether or not he continues in the profession.

There is ample evidence that such premises are generally acceptable to those who are administratively responsible for insuring the highest possible quality of service by the first-year teacher and his retention, when justified, in the school system. One may look particularly to the many fine orientation programs now in operation throughout the country. Their development has been based upon a concern for the retention of the new faculty member, and from a survey of the programs in operation, a detailed description of orientation procedures may be drawn which would seem to hold great promise for the school system which wants to face squarely its responsibility to first-year teachers.

Prior to formal acceptance of a position and signing a contract, the applicant is invited for an interview. If from out of town and arriving by train or bus, he is met at the depot; if driving in, he is properly directed to the superintendent's office. Instead of the interview being a brief inquisition of the candidate, he is accorded the opportunity to learn as much as he can about his possible employer, the school system in its totality, and the community in which he may soon live. Introductions to the staff are made; information is provided in regard to the system, the position, and the community. The principal of the school in which he may teach completes his introduction with a visit to his school, lunch, and a frank and honest discussion with him of such matters as where teachers live, cost of living in the community, transportation to school, places to eat, PTA, class load, etc. Basically, the thought behind such an elaborate interviewing technique is simply: "Let's make sure that this applicant has a true and over-all view of this situation and that he wants the position as much as we want him to fill it."

Between the time of acceptance of the position and the teacher's reporting for the opening of school, the practice is becoming increasingly common of providing him with specific information and

² See particularly the list of references on orientation programs for teachers in Fi. st-Year Teachers in 1954-55. NEA Research Bulletin. Vol. XXXIV, No. 1, February, 1956. Washington, D. C.: NEA, 1956. p. 46.

maintaining contact with him. Thus, the beginning teacher during this interim, generally the summer vacation, is informed of his teaching assignment and receives an informal note of welcome from the building principal with an offer to help with living arrangements; he may also receive a letter from his grade chairman or his department head or from any supervisory personnel welcoming him to the system and assuring him of assistance in all of the matters pertaining to his position; and, toward the end of the vacation, a note may arrive from his "big brother" asking for his time of arrival, if from out of the community, and an invitation to help him get settled.

The practice generally followed at the opening of the school year is to hold a pre-school conference with the first day reserved exclusively for the first-year teacher. Of course, their number will determine the practicality of this suggestion but, when followed, the procedure customarily is to spend the first two hours in their respective schools going over the plant, discussing such matters as handbooks, daily schedules, requisitioning procedures, directories, and the curriculum. Following a coffee break, a general session is held with brief greetings by the superintendent of schools and the mayor or a representative of the chamber of commerce; each firstyear teacher is introduced to the group—the locality from which he comes, college attended, prior experience, if any, and school and grade assignment may be mentioned; an opportunity is provided to meet members of the board of education, administrative and supervisory personnel from the central office, and other building principals. Frequently time is provided for an explanation on completing forms for withholding tax, retirement deductions, social security, and even bank deposits. Following luncheon, with these teachers often as the principal's guests, the afternoon may be spent in a tour of the city arranged for and conducted by the chamber of commerce, during which, visits are made to industrial concerns, banks, and stores, and sometimes climaxed by a flight over the city or community. A dinner, at which the administrative and supervisory staff host the first-year teachers, concludes the day, with each principal seeing that his teachers have transportation home and to the meetings the following morning. The remainder of the orientation preceding the formal opening of school consists of general meetings and group conferences, includes all of the personnel, and emphasizes problems which are of general concern to the school system.

After school opens, the local teachers' association may provide a picnic for the new teachers; the PTA may hold a reception in their honor; a general faculty dinner may be held early in the fall; indeed, in more than one system today, the student council welcomes each first-year teacher with flowers and a friendly note. Individual faculty members and other school personnel throughout the year extend invitations to their new acquaintances to visit in their homes, to go to church with them, and to attend meetings of various social, fraternal, and civic organizations.

In regard to the professional aspect of the position during this initial period of contract, an emphasis is placed upon the availability of help and assistance in matters related to the newcomer's position: individual and group conferences with the principal, with other teachers, with specialized personnel; a planned in-system visiting day after a few weeks of school; the opportunity to grow and develop professionally through supervision which is of the high-

est quality.

Such orientation practices imply, quite obviously, that the responsibility for insuring high quality service from the first-year teacher and his retention in the school system extends over a minimum of one year. As the AASA pamphlet, Off To A Good Start: Teacher Orientation, has pointed out, orientation includes the periods of contact to contract time, contract to reporting time, reporting and getting started, and finally the period of adjusting to the job.3

Fulfilling this responsibility in regard to any one of the periods suggested entails a great amount of administrative leadership but is particularly difficult in regard to the last, and probably the most crucial, period. The normal demands upon the time and energy of the administrator as the year progresses frequently leave the firstyear teacher without the professional guidance and direction he needs. Without such leadership, the orientation program grinds to a stop. When the needs of the first-year teachers in a school system exceed the amount of time and attention available from individual building principals and central office staff, the promise of professional assistance should not be forgotten or shrugged off as "impossible right now" but should be redeemed in some fashion.

³ The American Association of School Administrators. Off To A Good Start: Teacher Orientation. Washington, D.C.: The Association, 1956. p. 9.

The investigation of this problem suggests as a possible solution the establishment of a program of in-service education specifically and solely for the first-year teacher and of a consultantship to effect the operation of the program. In regard to the program, it may be suggested that it:

(1) Would supplement the existing program for orienting and

inducting first-year teachers.

(2) Would operate apart from, but not in disregard to, the supervisory program of the school system.

(3) Would extend throughout the school year.

(4) Would be built upon the problems peculiar to the first-year teachers as those problems emerge during the year.

(5) Would encompass all of the problems which pertain to the individual, as a classroom teacher, as a member of the faculty and of the profession, and as a part of the community.

(6) Would provide assistance to the individual first-year teacher as he expressed a need for such assistance and to the group of firstyear teachers as their common problems and needs became known.

In regard to the consultantship, it may be suggested that the

qualifications for the consultant should include:

(1) Adequate professional preparation as a teacher and educational leader.

(2) Experience as a classroom teacher in a school system and as a critic teacher.

(3) Experience in the preparation of teachers and of administrative-supervisory personnel.

(4) Knowledge of and experience in working with the problems

of the first-year teacher.

(5) Skill and experience in counseling, both in individual and group situations.

(6) Availability in regard to time.

(7) Command of resources, both material and personnel.

(8) Familiarity with the school system and the community

which it represents.

The feasibility of any program must be determined by the conditions and circumstances peculiar to the individual school system; consequently, the specific features of the suggestion admit of considerable modification. For instance, the consultantship might well be simply an extension of the "big brother" concept used so effectively in the preschool orientation period; or, an administrative assistantship in the area of supervision or curriculum might replace the consultantship. The particulars of the program are relatively unimportant; each school system, in the final analysis, must plan in accordance with its particular situation in mind. However, all schools today:

(1) Must accept the responsibility of inducting into and retaining in the profession the first-year teachers.

(2) Must implement this responsibility by providing a program of professional assistance which will follow the first-year teacher throughout the first year, the crucial year, of his teaching.

(3) Must make a cooperative effort in this regard in order to retain first-year teachers in the profession and thus take one step toward the solution of the problem of an inadequate supply of professionally prepared teachers.

SPEECH AND HEARING AS IT RELATES TO SPECIAL EDUCATION

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Introduction. The main premise upon which American education is based, is that every child is entitled to an education appropriate to his abilities and needs. School programs, therefore, are not developed to fit just the hypothetically average child, but to carry forward the democratic objective of educating all of our educable children-regardless of special handicaps or special limitations. The field of special education was evolved initially as an adjunctive feature of general education and was based upon a realization that some types of instruction can best be provided apart from the regular classroom. Thus, general and special educational services have become coordinately dedicated to the fulfillment of our most basic educational objective.

The Status of Speech and Hearing Services. By the time it had achieved this coördinate status, special education had formalized special adjustive school services for children of the following categories: gifted; mentally retarded; crippled, including cerebral palsy; those with special health problems; blind and partially seeing; the socially and emotionally maladjusted; the deaf and hard of hearing; and those with speech defects. The two areas to be discussed in this

paper are speech and hearing.

Before we examine the speech and hearing areas as features of special education, we should examine the type of special services included within the broader special education framework. The most common organizational patterns are: (1) special schools and classes for long-time placement, (2) special classes for short-time placement, (3) special supplementary instructional services, (4) home and hospital instruction, and (5) residential school programs. Usually the deaf are included in either group 1 or 5, the hard of hearing in 2 or 3, and the speech defectives in 3 or 4. Thus, the areas of speech and hearing cover, in their patterns of training, all types of services offered in special education. For this reason, they can surely claim to be basic areas in the field of special education.

Of the nine areas of special education listed in the Biennial Sur-

vey of Education, published in 1954 (1), speech correction seems to be the largest. The report shows that a total of more than sixty per cent of all children receiving special educational services, are children with speech problems. The report also shows that speech correction is the fastest growing area of special education in terms of services rendered and also that there were more speech therapists trained during the period covered by the report. The report further shows a trend toward the training of speech and hearing workers who would be qualified to perform needed therapy for children with both speech and/or hearing problems. The report shows that a total of fifty-four training institutions now offer a composite degree in the two areas. The author is favorably disposed toward this trend for reasons that will be explained in the section designated as Speech and Hearing.

Speech Programs. The incidence of speech problems have been found in various studies (2, 3, 4, 5, 6) to be somewhere between six and twelve per cent. The State Division of Special Education in Ohio assumes in their state planning that approximately ten per cent of school children have speech deviations which require special education. They further assume that four per cent of these children can be helped by the classroom teacher with the guidance of the speech correctionist. Five per cent of the total are likely to require re-educative measures, and about one per cent need special services beyond the scope of the speech therapist. The last mentioned are likely to be predominantly psychological or medical in nature. Nearly all of the children with speech problems encountered in the public schools are able to attend the regular classrooms and to compete successfully with other children if they receive the necessary retraining in speech correction and if the classroom teacher is cognizant of the problems and her responsibility to each child and his difficulty. Because the function of special education in helping the speech defective child is a relatively nominal one in total time and effort, the expense of providing the needed assistance is also less than for most other types of special education. The typical program recommended by policy makers in many of the states today calls for a weekly case load of seventy to one hundred children with new cases replacing those who are released throughout the year. With this case load it seems possible to give two therapy lessons per week for each child, provided much of the work is done in groups. The plans are usually flexible, allowing the correctionist to utilize his energies in whatever way he feels to be most effective in meeting the community need. Experience seems to indicate that if the therapist utilizes teacher coöperation, he can meet the needs of a town up to fifteen thousand people. Beyond this, it seems advisable to employ the services of a second therapist.

Hearing Programs. Professional workers assume that hearing problems constitute two to five per cent of the total school population, but that a large percentage of these problems can be prevented by early detection, diagnosis, and appropriate training. To understand the devastating problem of the hard of hearing and deaf, one should start by recognizing the seemingly unimportant problems of those with slight defects in hearing. Since these cases of mild hearing loss are numerous, every teacher sooner or later comes in contact with them. In many instances, however, they are not recognized and various maladjustments develop.

Prominent among the problems are lags in educational achievement. The author has seen a number of such children. One case in particular stands out as an educational casualty. She was a sixth grade girl with an irregular achievement profile which averaged about three years below her grade placement. Even in casual conversation she seemed hesitant and unsure of herself. The weakest feature of her educational achievement was language, especially vocabulary. In one respect the girl was outstanding. She had managed to progress through several years of elementary school with a hearing loss which averaged 55 db. (well below the level of most conversational speech).

The otologist assumes that many of the deaf and hard of hearing cases start with slight hearing defects. The problem is, therefore, not one merely of special education for the severe cases, but unrelenting efforts to find and deal with all cases in their initial stages. Actually, the program of special education for children who are deaf and hard of hearing begins with the desire of local communities to do the special things necessary to educate these children as normally as possible. A community hearing conservation program as usually evolved can be broken down into six essentially interrelated phases; namely, detection, referral, medical treatment, follow-up, community relations, and educational adjustments. A better picture of the part played by the classroom teachers, school administrators, family physicians, school nurse, local health department, local civic groups, diagnostic centers, and state agencies can be ob-

tained by examining the accounts of programs published by the Divisions of Special Education in many states.

Speech and Hearing Programs. One of the logical steps in developing good services for children's speech and/or hearing problems is to acknowledge facts that face us in many of the communities where we are to have programs. A realistic look at these communities in several of our states shows many of them not to have enough children to justify both a speech correction and a hearing worker, but they seem more likely to need a composite speech and hearing worker. The programs outside of the larger cities then might recommend that whenever possible the speech correctionist should be qualified to participate in hearing conservation programs to the extent of doing screening and follow-up audiometric testing -and eventually speech reading and auditory training with hardof-hearing children. The hearing therapist, in turn, should be trained as a qualified speech correctionist and would be capable of setting up a suitable case load of speech problems as a supplement to the work devoted to hearing conservation. There seem to be two additional assumptions which, if true, would support this recommendation: first, the training of a speech or hearing therapist is better for having had courses in both areas; secondly, the practical job requirements in special education, even in large city programs, are such that both skills are essential for maximum effectiveness.

The hearing therapist referred to here should not be confused with a teacher of the deaf whose training and educational responsibilities entail work in basic language training and more extensive work with school materials and subject matter. The teacher of the deaf will set up programs for preschool deaf children, work with deaf children in day school programs, and offer instruction in state schools for the deaf. This is not, however, the speech and hearing worker referred to above.

Five Basic Assumptions. The five basic assumptions which follow are presented as guiding principles for school administrations who have or who are contemplating programs in speech correction and/or hearing conservation.

First of all, programs should be considered a responsibility of the local school administration. The schools should initially assess their need for speech and hearing services and should employ specialists to develop the necessary programs. In this way, community assistance, budgeting details, administrative problems, room space

and equipment, teacher and parent conferences, can be worked out through the usual administrative channels. Such an arrangement also is likely to lead to good community support since most towns are accustomed to assisting with the worthwhile service activities

endorsed by their school leaders.

Second, the programs should be regarded as basic features of modern education and not as a set of activities benefiting a few children. Since educational progress depends so much upon good speech and listening habits among the children, school programs should assist the marginal and submarginal speakers to become more competent. A period of speech correction and auditory training may in many instances contribute not only toward better adjustment but also toward better progress in the total school program.

Third, the speech and hearing workers should assist the teachers and parents to develop a better understanding of the processes of language development. There is no reason for vagueness about the objectives or the procedures employed. Discussions, demonstrations, workshops, and formal conferences should lead eventually to a spirit of coöperation and mutual assistance. In this way, a

more complete service can be established.

The fourth concept is based upon what has been described as the team approach in education and includes the assistance of related professional workers. Before reliable goals can be set, many children should be referred to medical or other specialists in the community or, perhaps in some instances, to a diagnostic center in some other city. Many speech and hearing problems seriously affect the maturation and the life experience of the child. Anything short of complete diagnosis with the delayed speech, cleft palate, hard of hearing, or cerebral palsied child is not good enough. If the community secures evaluative help for these children who need the attention of specialists, the program should progress more satisfactorily.

Lastly, the school and the community should regard the speech and hearing activities as features of the broad program of special education. They should expect to call upon the guidance and support of the state agencies (i.e., the Division of Special Education, the Departments of Health or Welfare) in the initial and continuing stages of the program. They should also welcome the supervisory function which the state office is equipped to provide.

As the program develops there should be progress reports and discussions of ways to improve the service. This procedure is typical of the modern educational program. Some re-evaluation will take place at building meetings and some at the administrative staff levels. The program should develop flexibly in relation to community needs and resources. The most important feature of the program, of course, is the skill, energy, and resourcefulness of the speech and hearing therapist. As he comes to know the community and to be identified with it, he is able to develop new patterns of coöperative service. The best patterns are likely to include well-informed teachers and parents as well as coöperative professional organizations.

REFERENCES

(1) Biennial Survey of Education, "Statistics of Special Education for Exceptional Children," U. S. Department of Health, Education and Welfare, 1952-53.

(2) M. E. Frampton and R. G. Rowell, Education of the Handicapped,

Vol. 1, "History," pp. 94-97.

(3) The Illinois Plan for Special Education of Exceptional Children, The Speech Defective, Circular Series, "E," No. 12, State Department of Public Instruction, Jacksonville, Illinois.

(4) A. W. Mills and H. Streit, "Report of a Speech Survey, Holyoke,

Mass.," Journal of Speech Disorders, Vol. 7, pp. 161-167, 1942.

(6) Report from Files of Division of Special Education, Topeka, Kansas.(6) White House Conference Report, 1950, "Speech Disorders and Speech

(6) White House Conference Report, 1950, "Speech Disorders and Speech Correction," Journal of Speech and Hearing Disorders, Vol. 17, pp. 129-137, 1952.

COÖPERATION IN EDUCATION BETWEEN THE THOMIST AND EXPERIMENTALIST

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I

While the philosophical foundations of Pragmatism were being severely attacked by a host of critics, John Dewey in the spirit of that philosophy influenced American public education. Looking at the traditional school he found it altogether too static: its ends and policies were fixed, its curriculum was frozen in the classical ideals of a dead past, and its methods were wooden, formalistic, and sometimes cruel. This system he felt was best calculated to produce only passive individuals for a society that, by contrast, required a maximum of self-direction from its citizens. Therefore, he offered teachers and administrators a dynamic view of education as growth that has "no end beyond itself." In Democracy and Education1 growth is not the spontaneous development of a so-called inherently good nature—an outcropping of egoism in isolation from other individuals; nor is it the disciplined development under external authority and control of an inherently inordinate and immature nature; rather it is the self-directive creation of a nature out of the student's experience under the permissive yet expert guidance of a teacher. Beyond itself growth has no end in that it provides the matrix from which are born felt goals whose acquisition results in further growth while the quality of that growth is valued in its contribution to immediate, individual-social, democratic living. In brief, education is a process of democratic living in which educational ends, dynamic and everchanging, are perhaps distinct but not separable from the means out of which the ends are derived. This view of education, initiated in large part by John Dewey and developed by his disciples, has been accepted not only in elementary and secondary schools but especially in schools and colleges of education across this nation. The influence of the Experimentalist is indeed widespread and, furthermore, he intends to maintain it.

¹ John Dewey, Democracy and Education (New York: Macmillan, 1950). See especially pp. 49-93.

The Thomist, however, has his sphere of influence in the public but especially in the Catholic schools and colleges in this nation, and in the spirit of Cardinal Emmanuel Suhard he has worked toward a synthesis that should reconcile tradition and progress in education.2 Unlike the Experimentalist, the Thomist has made a partial and more moderate rejection of the traditional school. If its proximate ends have not been modified to meet social change, its ultimate ends, being absolute and universal, do not need to be modified; if its curriculum has embodied an antiquarian emphasis upon the past while its teachers have failed to communicate the classics in terms of the myths and symbols of an America in transition, it has, nevertheless, emphasized the true, the good and the beautiful, human values that are ever present; if some of its methods have been stern reminders of an outmoded puritan type of discipline, it has also been aware of a perennial need to guarantee the proper exercise of authority. However, criticism becomes sharpest when the traditional school is observed to educate directly, if unwittingly, for the status quo in society. The Thomist insists that "teachers have neither to make the school into a stronghold of the established order nor to make it into a weapon to change society."3 Rather education is explained in terms of a rational human nature who remains essentially the same throughout life but who from birth grows toward a ripening of that nature in a contingent world. Such a person whose distinctive natural gift is his intellect must depend upon the particularized means of education in "this" society at "this" time to achieve his fullest intellectual development. Thus he tends toward an end which is the same for all men despite the time, place or changes in society. Education, then, is neither conservative nor revolutionary; it transcends both immediate social purposes and particularized educational means; it is everywhere human and primarily intellectual.

² For a sample of Cardinal Suhard's writing see his *Growth or Decline?* The Church Today, trans. James A. Corbett (South Bend: Fides Publishing Company, 1948).

³ Jacques Maritain, "Thomist Views on Education," Modern Philosophies of Education, The Fifty-Fourth Yearbook of the National Society for the Study of Education, Part I, (Chicago: University of Chicago Press, 1955) p. 69.

п

Opposition in educational theory is commonly known by those who are professionally interested to have its roots in the opposing philosophies of the Thomist and the Experimentalist. On the philosophical level there is disagreement about the relative importance of change, about the existence of permanence, about what ultimately constitutes the real. For the Experimentalist the interaction between organism and environment is the real or what Dewey calls "the primary fact" and the "basic category." It is the process within which an organism continuously acts and undergoes the consequences of its actions. What is fundamentally real is the process or the ebb and flow of events; only in a secondary and derived sense (being derived out of the process) are subjects and objects real. Furthermore, the real is not given; rather on the basis of the findings of biology and of psychology as based upon biology the process is taken to be the real. In itself there is only an unanalyzed or undifferentiated continuum. Consequently it has a hypothetical and relative value which is continuously validated by looking to the consequences of upholding this as a principle for guidance in administration, teaching and everyday living.

For the Thomist being is the real. There is no change without something changing. Both subjects and objects share the real or being and, although they may be modified within interaction, they are given prior to the process. In fact, interaction or experience is derived and secondary in origin; it is what results when a subject comes into contact with an object. Being, moreover, is intrinsically intelligible and is unconditioned by consciousness. It, therefore, has an absolute value, and is the primary object of the intellect which seeks to possess it, fundamentally, not for its consequent utility but for what it is.

Ш

The differences above are thoroughgoing, mutually opposed and irreconcilable. And, educational differences derived from these few conflicting philosophical principles are steadily multiplied. In such manner the Thomist and the Experimentalist in education grow

⁴ John Dewey, Reconstruction in Philosophy (New York: American Library, 1950), pp. 77-93.

opposed; still any attempt at compromise is to be avoided—this, together with glossing over differences and making much of merely apparent similarities. On the contrary, a knowledge of differences once they are sharpened and formulated into issues affords an understanding of the opposition and reduces the questionable practice of knocking down straw men. However, something more is needed. Increasingly both Thomist and Experimentalist are meeting at the same conventions, talking on the same panels, writing for the same journals, planning on the same committees—indeed they are sometimes committed to teaching the Philosophy of Education courses in the same college of education. What is needed is some ground or basis of agreement so that systematic planning and communicating at short range may progress without the name calling, contempt and other intractable emotions currently generated in those upholding mutually opposed philosophies of education.

The need is clear enough, but is it possible that people with such divergent views possess a basis for achieving genuine agreement? Attention to opposing educational and philosophical principles tells us what is not possible; on this level, agreement could be achieved only by compromising differences and that would amount to abandoning the principles of either the Thomist or the Experimentalist or both. However, the proposition is here set forth, call it a hypothesis if you like, that if we prescind from contrasting these opposing principles on the theoretical level and examine their respective applications in education, we can determine a basis for concerted action.

In the interests of space let us confine our examination of these applications to educational methods and to related policies and decisions. On the one hand methods comprise those instrumentalities which are carefully contrived in the process of achieving educational ends and may be classified as a making. On the other hand the related policies and decisions constitute those principles of action which govern the proper execution of methods and in that they are directive of action may be relegated to the order of doing. Fur-

⁶ A decision is here defined as a judgment about what to do in this case here and now while a policy is defined as a judgment about what to do in a class of cases both now and in the future. See Mortimer Adler, "In Defense of the Philosophy of Education," *Philosophies of Education*, the Forty-First Yearbook of the National Society for the Study of Education, Part I (Bloomington, Illinois: Public School Publishing Co., 1942), p. 224.

thermore, policies and decisions are formulated in accordance with the character of methods while methods in turn are characteristic of a particular set of educational and philosophical principles.6 Thus, some observers might conclude that for the Thomist and the Experimentalist in education the differences between their methods, policies and decisions are, like their underlying principles. thoroughgoing, mutually opposed and irreconcilable. But, the above proposition is not only maintained, it is now made more specific: the different conceptions of an educational method which arise from the application of opposing philosophical principles constitute a basis of coöperation (between the Thomist and the Experimentalist) both in formulating and executing related policies and decisions. What follows is a limited analysis of educational methods in general and of problem solving in particular, followed by suggestions for achieving agreement which include action upon educational policies and decisions.

IV

Methods, understood as artistically contrived means of achieving educational ends, possess differences whose character has been an issue in the history of education. During the early decades of this century, certain educational methods became identified with the Progressive Education movement in the United States. They were preferred by the Experimentalist and were commonly looked upon as an outgrowth of his philosophy. In recent years, however, the Thomist in education has affirmed that they are not organically related to the Experimentalist philosophy, that many had been known and advocated long before the rise of the modern educational theorist and, further, that many also are eminently justified in the light of Thomistic principles. With this in mind, the Thomist has felt that he could endorse certain of those methods pre-

⁶ It is necessary to distinguish between practical judgments that are formulated in accordance with principles and those that arise merely out of accidental and contingent circumstances surrounding action. These latter are not considered in this article.

⁷ For examples see George Johnson, "The Activity Curriculum in the Light of Catholic Principles," Education, 61: 414-419, March, 1941; William J. Sanders, "Thomism, Instrumentalism, and Education," Harvard Educational Review, 10: 95-113, January, 1940; Edward J. Power, "Progressive Education and Bishop Spalding," The Catholic Educational Review, 51: 671-679, December, 1953.

ferred by the Experimentalist while necessarily rejecting his underlying philosophy. Thus, for example, although he does not share the Experimentalist's enthusiasm for the problem-solving method, the Thomist recognizes it as one among several effective aids to learning—to be preferred, certainly, to the so-called inflexible devices of the traditional school.

An endorsement of this sort is legitimate enough. Yet, the Thomist caught up in the events of the history of education has realized that he must stress the common notes of an educational practice irrespective of its connection with an opposing philosophy. Quite naturally he did not indicate the distinctive differences that actually exist by virtue of its philosophical connection. As a consequence he has been required to choose between two alternatives: first, he can conclude that an educational method is essentially the same for all, while its endorsement by particular persons should account merely for accidental or incidental modifications. When he draws this conclusion, the Thomist usually accuses the Experimentalist teacher of going to ridiculous extremes in the classroom because of undue emphasis upon these incidentals. Likewise, he blurs the distinction between the Experimentalist teacher and the fadists, those unfortunates who not only fail to grasp the implications for education of a modern relational philosophy but who, alienated from their own intellectual and spiritual heritage, clutch first for this and then that for their theories and practices. Finally, he is likely to create the impression in the minds of administrators, teachers, and laymen alike that there is nothing essentially different about Progressive methods as they are advocated and used by the Experimentalist. What matters, however, is that when differences in educational methods are oversimplified, the opposition is made to look ridiculous, and neither side is properly disposed to consider a basis for concerted action.

On the issue of methodological differences the Experimentalist takes an opposite stand by viewing his metaphysics and his educational principles and practices as "logically interdependent and inseparable." According to this view, philosophy and practice are relational and interactive. Philosophy criticizes, rationalizes, and formulates practice while the consequences of acting upon the practices verify the philosophy and provide a basis for its further crit-

⁸ Lawrence G. Thomas, 'What Metaphysics for Modern Education?',' The Educational Forum, 6: 129-130, January, 1942.

icism and formulation. Within the interactive process each is reconstructive of the other; apart from the process, each loses its identity and distinctive character. Thus, a method cannot be brought over from the past or from some other metaphysical system. In short, a method which is supposedly endorsed by both Thomist and Experimentalist is doubtless not one but two methods; only the name is the same. And when a Thomist insists he is using the same method as that endorsed by the Experimentalist, either he is not taken seriously or he is accused of being inconsistent. Differences here despite their justification are needlessly exaggerated

and preclude any possibility of achieving agreement.

As this presentation suggests, if there is a basis for concerted action, it will be found somewhere between the two views expressed above. For the Thomist such a basis is found in the other alternative available to him. Secondly, then, he can conclude that an educational method is only partly the same for all while its endorsement by a Thomist or Experimentalist accounts for radical differences. On the one hand, for example, the problem-solving method embodies the following steps that can be identified by a person despite his philosophical orientation: (1) problematic situation, (2) problem, (3) hypothesis, (4) data, (5) testing. These steps are not mere names; what he understands apart from his philosophy is precisely what they are. A problematic situation is an area of confusion in which a person is aware of the need for inquiry without knowing as yet what its object is. A problem is the specified object of inquiry. It is the defined unresolved difficulty. In short each step possesses a generic character that is separable from a philosophy that justifies it.

On the other hand, this method like others is a mental construct in which theoretical conceptions of man, knowledge and reality enter to affect under the formative power of the intelligence a specific determination and a specific difference. In order to illustrate the specific difference in the Progressive method of solving problems, as an example reference to a few theoretical principles—Experimentalist principles—might be made to clarify the illustration. First, man is a biological organism whose outstanding behavioral trait is his self-conscious and reflective purposing and whose fundamental drive is toward adjustment to the environment. Having evolved in toto from the adjustmental process, man is struggling constantly to reshape himself both as an individual and as a mem-

ber of society. Out of this struggle, goals are defined, projected, achieved and reconstructed; above all they are the experienced or felt goals of individuals; they are multiple, entirely experiential, tentative and never final. Secondly, objects of knowledge are created, not discovered in experience. What are known are created out of sensations and perceptions (non-eognitive physical responses) insofar as they stimulate or evoke reflection and courses of action (non-cognitive mental responses) whose operations in experience have the intended consequences. Knowledge is not created in the sense that it is a reproduction of what is or a possession by the intellect of a reality that is intrinsically intelligible. Rather it is a production in action out of the non-cognitive reactions within experience of the cognitive, the objects of knowledge. In other words appearing first is a non-cognitive hypothesis; knowledge emerges when action upon the hypothesis produces the consequences that were anticipated. Thirdly, reality as we have seen earlier is taken by the Experimentalist to be the ebb and flow of events. But apart from a subject there are no objects; there is only an undifferentiated continuum lacking inherent intelligibility.

A method of solving problems that is contrived in view of these principles manifests differences that are characteristic of these same principles. Thus the problematic situation is an actual life situation in which the process of adjustment is temporarily interrupted. A student is faced with the non-cognitive and the puzzling out of which his purposes are later developed. At this time, however, there is only an uneasy awareness that something needs to be done to maintain a life balance, without as yet knowing what to do. Since this step initiates the actual growth of experience, a teacher acting upon policy manipulates the environment in such a manner that students first will be involved in real-life situations. The problem, which emerges from a "differentiation out" of the non-cognitive elements in the situation, is a felt difficulty whose solution will restore the desired balance. In this second step a teacher acting again upon policy helps each student to locate and define the character of his felt difficulty. In these and the remaining steps of the method the character of the differences is the same and may be described variously as adjustmental, naturalistic and psychological.

Contrast this with the same method as endorsed by the Thomist and the specifying difference is unmistakable. In the hands of the Thomist the problematic situation requires at least a few basic in-

tuitions into a particular subject matter which is itself organized in such a manner as to indicate a lack of knowledge for the student in that area. The problem is formulated both according to the demands of an intrinsically intelligible subject and in terms of what needs to be known by the student and constitutes an intellectual difficulty whose solution promotes directly and primarily a greater understanding of that subject through its principles or causes. In the areas of the social studies and the humanities, teachers at the secondary and elementary school levels will emphasize the application of knowledge already acquired by the student to the solution of problems. Since these problems are not immediately practical or "life centered," solutions are not acted upon or verified. In the area of the natural sciences, especially in laboratory courses, solutions are tested so that principles previously discovered may be grasped in a more vivid manner. By contrast, then, the method is knowledge-centered, intellectual and logical. The conclusion appears legitimate enough: an educational method that is contrived separately by both Thomist and Experimentalist is for each generically the same and specifically different.

v

The Thomist may observe in the foregoing analysis a de facto basis for concerted action on the condition that method is viewed as having a sameness which is objectively constituted possessing, as having a sameness which is objectively constituted possessing, as having a sameness which is objectively constituted possessing, as having a sameness which is objectively constituted possessing, as having a sameness which is objectively constituted by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown. But this condition will very likely be rejected by the Experiown.

The rejection of the Experimentalist is understandable; he cannot accept a Thomist conception of method as a justification for not accept a Thomist conception of method as a justification for not accept a Thomist conception of method as systematic coöperation. Yet the reconstructive principle so central systematic coöperation. Yet the reconstructive principle so central systematic coöperation is not necessarily an obstacle to viewing method as in his position is not necessarily an obstacle to viewing method is partially the same for himself and his opponent. What is required is partially the same for himself and his opponent. What is required is partially the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception of sameness which at the same time that each has his own conception, the other. In a department, meeting of will justify his working with the other.

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is being discussed, the Experimentalist could begin by assuming that in its generic or broad aspects this method is the same for each; on this assumption he, together with the Thomist, could formulate suitable policies and decisions which would govern its proper execution. Finally, he could observe the consequences of conjoint action upon these policies and decisions and could conclude that the method is partly the same for each on the condition that its character is understood to have emerged out of the reconstructive process and to be organically related with its philosophy. Let this last assertion be entertained by the Experimentalist at least as an hypothesis which, in the interest of furthering cooperation, of reducing misunderstanding and of eliminating prejudice, is worth testing. Certainly no one knows any better than he that the character of educational method is determined by him ultimately, not on the theoretical level but on the practical level, the level of action upon method itself.

VI

In a process which originates in opposed theoretical conceptions and converges upon practical agreements, nowhere should systematic coöperation between the Thomist and the Experimentalist be more manifest and necessary than in the formulation of policies and decisions. There are at least two bases upon which these may be formulated. The first has little reference to what has been suggested above but, nevertheless, deserves mentioning. It resides in a body of shared practical convictions that have been handed down in education without being formulated. Professor Maritain speaks of a similar body of convictions in his Man and The State when,

This has been brought home to me over a period of months. Having had the opportunity to work at close range with an Experimentalist in a College of Education, I became aware that while we obviously disagreed in philosophy we were not disagreeing about what we should do: about including certain materials in the Philosophy of Education sections, about introducing particular questions into the doctoral written examinations, about what students should do, about generalizing with evidence, making distinctions and, generally, about relating philosophy to the practical problems of education. And it appeared to me that as long as we did not concentrate upon theoretical reasons for what we did, we could guarantee a common kind of professional competence for students with divergent philosophical and spiritual views. Our agreements were practical and spontaneous deriving, it seemed, from a common heritage of unformulated practical convictions which are handed down in the American system of higher education.

quoting from his address to the Second International Conference of UNESCO, he says:

"How, I asked, is an agreement conceivable among men.... Since the aim of UNESCO is a practical aim, agreement among its members can be spontaneously achieved, not on common speculative notions, but on common practical notions, not on the affirmation of the same conception of the world, man, and knowledge, but on the affirmation of the same set of convictions concerning action. This is doubtless very little, it is the last refuge of intellectual agreement among men. It is, however, enough to undertake a great work; and it would mean a great deal to become aware of this body of common practical convictions."

Again he says:

"However, when it concerns, on the contrary, the basic ideology and the basic principles of action implicitly recognized today, in a vital, if not a formulated manner, by the consciousness of free peoples, this happens to constitute grosso modo, a sort of common residue, a sort of unwritten common law, at the point of practical convergence of extremely different theoretical ideologies and spiritual traditions. To understand that, it is sufficient to distinguish properly between the rational justifications, inseparable from the spiritual dynamism of a philosophical doctrine or religious faith, and the practical conclusions which, separately justified for each, are, for all, analogically common principles of action."

Awareness of those convictions concerning action upon method would mean a great deal to the Thomist and the Experimentalist. At this point their efforts would be directed not toward determining formulations that are consciously based upon their respective conceptions of method but together toward making explicit in language what has been by each separately, yet spontaneously, expressed in action.

The second basis resides in the opposed theoretical conceptions of method where each opponent has a guide that he can use consciously and systematically to formulate with the help of the other their policies and decisions. Consequently both will purposefully confine their efforts to formulating policies and decisions that relate to the generic or broad aspects of method. As an example of this guidance let us consider how both in a department meeting of teachers should approach the subject of relevant data as one step in the problem-solving method. They will avoid discussing the specific

¹⁰ Jacques Maritain, Man and the State (Chicago: University of Chicago Press, 1951), p. 78.

¹¹ Loc. Cit.

data that will enter into the solution of the individual problems of students; yet they will strive to agree as much as possible to the same resource materials that are to be ordered and prescribed as reserve data for future problem solving. True, the Thomist may view certain of these materials as the subject matter of the curriculum to be learned directly according to its inherent intelligibility and the laws of human learning. But then many of these materials may be selected by the Thomist as relevant data for problems that he will organize prior to instruction. The Experimentalist, for his part, will view all of the resource materials as potentially relevant data for problems that may eventually arise in the classroom.

But it may be asserted that the reserve data, themselves, will be different in accordance with the specifically different character of problem solving, that, for example, as student problems and purposes are characterized as individual-social, so the reserve data will likewise be characterized. Very likely the assertion is valid; conceivably, a sociological novel, poem or anthology of poetry might be selected for a high school English literature class based on the strong "hunches" of an Experimentalist teacher that such material will meet the individual-social needs of one or more students. Conceivably, also, the same novel, poem or anthology might be rejected by the Thomist because it lacks intrinsic literary and esthetic perfection. Nevertheless there is a great literary tradition in American and English literature which can meet both the demands of the Experimentalist and the Thomist. For the Thomist it represents an intrinsically good and permanently valuable end capable of perfecting the native intellectual powers of man; for the Experimentalist it represents a potentially useful means for "enriching the ongoing experiences of individuals" in a democratic, American society. For both, however, it can represent a general area of common expository, descriptive, argumentative, narrative and dramatic content with corresponding emotional, imaginative, intellectual, rhythmic and melodic qualities. Policies and decisions will then be restricted to selecting and maintaining certain of these literary materials as reserve data while the conjoint execution of these policies and decisions will be justified expressly by reference to the character of the problem-solving method.

A final objection might be raised. Is it not possible that the exponents of Thomism and Experimentalism might delude themselves

if together they agree to the same policy formulations and then try to act upon them? Could it be that they might reach agreement upon mere words and not terms so that the same formulation might signify not one but two policies, one for each exponent? Consequently, each while thinking that he is coöperating successfully with the other would actually be executing an entirely different policy. There will be no delusion if both distinguish properly between the different meanings of policy which arise from the application of opposing philosophical principles and those activities that are associated with its formulation and execution. Agreement between the two will then be seen to take place not on the level of meanings but on the level of action.

What matters basically is that each has a rational justification for working with the other, securing the same changes, albeit for different purposes, but changes, nevertheless, that can be valued by both and, in fact, by every other educator who has a genuine

interest in the welfare of American education.

STAFF AND CURRICULUM EVALUATION: ONE PROCESS

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Since the school curriculum increasingly is defined as the total experience of a child within the climate of school life, the influence of all school personnel affecting the program should be evaluated continuously. If there is no cohesive and purposive pattern to the school curriculum developed out of common understanding by staff members, there can be no realistic basis for appraising the performance of an individual staff member. The emotional atmosphere of the school, for instance, must be the concern of the staff as a whole. A child is not merely under the influence of a given teacher. All personnel in one way or another affect his development in every year of his journey through school. There is a need, then, for a coöperative group attack on the problems of developing a desirable program of school life for the child, and an integral part of this group process must be cooperative staff appraisal in terms of how each staff member is contributing to the program. This is a democratic way. The alternatives are dictation by the autocratic administrator or the "let everyone do as he pleases" attitude of the laissez faire school.

Actually, the competence of an individual staff member cannot be determined realistically by checking various personality and character traits on the typical rating scale. This is an easy and cheap, but futile way of rating personnel. The master teacher cannot be indentified by referring only to such arm-chair conceived items on a scale as: "voice," "appearance," "discipline," or "preparation." A person may rank high in all such items and still be an undesirable teacher. Ultimately, the many and sometimes subtle influences of the teacher on the child and the ways in which the teacher goes about carrying into action the goals of the school—a

most complex pattern of professional behavior—can be evaluated only by those close enough to the person to know at first hand of his competence because they have worked with him in developing the school program or by those who work in a similar level or subject area and thus are competent to bring understanding to the evaluation. Ideally, an evaluation committee should be composed of both types of persons, including the administrator to whom the staff member is immediately responsible. The composition of the committees will change constantly but the principal should be a member of each. In fact, the involvement of administrators in nearly all phases of both program and staff evaluation contributes continuously to their professional growth and to their understanding of the curriculum.

Coöperative self-evaluation as a unitary process for evaluating both staff and curriculum is offered in response to a growing demand by school boards, administrators, citizens, and even some teachers for salary increments based upon better evidence of genuine competency. The coöperative process advocated in substitution for individual rating is based upon a commonly understood set of criteria. The performance of an individual will be delayed until he has had an opportunity to understand thoroughly the conditions under which he will be judged. Evaluations of individual staff members will emerge from the program evaluation, and the latter probers will emerge from the program evaluation, and the latter provides the opportunity for increasing self-awareness of the rôle the vides the opportunity for increasing self-awareness of the rôle the individual will be expected to play in the group enterprise which is shaping the school curriculum. He has, in fact, time to improve his shaping the school curriculum. He has, in fact, time to improve his insights as well as his practices before the day of personal evaluation.

Specifically, program evaluation begins early in the school year and proceeds for several months. It is aimed primarily at curriculum improvement, but it sets the stage for individual appraisal lum improvement, but it sets the stage for individual appraisal because such appraisal will be made in terms of how the individual because such appraisal will be made in terms of how the individual because such appraisal will be made in terms of how the individual because such appraisal will be made in terms of how the individual because such appraisal of this paper is devoted to the operational children. The remainder of this paper is devoted to the operational steps involved in the process of both staff and curriculum evaluation. First, the steps in program evaluation are presented. Second, the evaluative criteria common to both staff and program evaluation are set forth. Third, the procedures of staff appraisal are described.

The program evaluation phase. Self-evaluation of a school pro-

gram means that staff members develop appraisals of their practices by themselves, individually and cooperatively. They are the persons who are responsible for curriculum development and they should be the ones involved in curriculum evaluation. The cooperative self-evaluation process could have the narrow objective of simply working out together how well an individual teacher is doing the job within the total school program, with particular emphasis upon arriving at some sort of an agreed-upon "score" or "rating." This concept would be little improvement over the ordinary merit rating devices. Therefore, cooperative self-evaluation must in itself be considered a process for professional growth. The real strength of the process is that it leads to curriculum improvement. Emphasis is given to sharing the good features possessed by the strong teacher, discovering ways of helping the weak teacher, shoring up staff morale and mental health, and in every way improving understandings of the total program of the school. It must be clear that the primary focus is not upon an individual teacher who is to receive a rating but upon how information can be gained, and how self-assurance can be developed for a more effective school program. It can be made clear to the teacher that no secret devices will be utilized to arrive at a rating of performance.

It is important that the administrative staff do the following before coöperative self-evaluation by a school staff gets under way:

(1) Inform school board members and the entire school personnel of the details of a coöperative, self-evaluation program. They should understand the process, its purposes, and implications. This is the orientation period.

(2) Distribute copies of the guide that school personnel will use in the evaluation. An outline of this guide should include purposes, organizational matters, the evaluative criteria, and other pertinent

data believed necessary.

(3) Make arrangements for getting school committees appointed or help the faculty to develop its own preferred organization. Perhaps these details will have been worked out in the orientation sessions.

(4) Help the teachers to put the process into operation. The administrator should lend definite encouragement and leadership to get things started. Teachers are again re-assured that their written evaluations are not personally identified, even in the final stage of principal-teacher evaluation conference, or in any way passed

on to any other group. Furthermore, the administrator does not attend these first meetings.

In order to show how to swing the plan into action, perhaps the clearest description could be made in terms of presenting the steps involved. Again, each step is not to be followed slavishly and with no modifications. The suggested steps for the staff to follow are:

Step one: The individual teacher writes down what he is actually doing in the classroom in terms of the general evaluative criteria that will be presented in the next section. The teacher records his behavior in definite statements in three categories under each item in the evaluative criteria. The three categories are: (1) description of present practices, (2) analysis of strengths and weaknesses, and (3) suggestions for improvement. He should not write down vague, general, and meaningless paragraphs; if he applies the plan as described here, he cannot avoid touching upon all phases of instruction over a period of time.

Step two: When the various teachers within a school have had time to write up the process as described in step one, they are then ready to move from individual work to the horizontal or grade level committee, or subject matter field. The principal may encourage a steering committee to set a deadline for accomplishing step one.

At this stage the teacher shares with colleagues his practices, analyses, and suggested improvements by grade level or subject matter, if in the high school. Perhaps the chief benefit to professional improvement may be found in this sharing process, where sional improvement may be found in this sharing process, where sional improvement may be found in this sharing process, where somes a learning experience for all persons involved. They exchange comes a learning experience for all persons involved. They exchange views freely and should have no fear or embarrassment about disviews freely and

Step three: Next, the program evaluation progresses to a vertical committee; that is to say, several grade levels grouped together to composite the horizontal committee reports and to discover the composite the horizontal committee reports and to discover the more general problems of continuity or articulation. A vertical committee normally would be composed, for instance, of representatives mittee normally would be composed, for instance, of representatives of all the primary grades; others would be made up of intermediate

grade personnel, of junior high school personnel, or all English teachers of the high school. Supervisors, consultants, counselors, and administrators enter the process when it turns into the vertical stream.

Step four: Finally, these various reports are received by a central committee within the school. This committee should have representatives from each grade level, or subject matter field, a parent or community representative, and persons from the higher echelons of administration and the school board. It is here that a final report of a summary nature is made and considered.

Optional step five: If it is desirable to formulate a self evaluation report for an entire school system, it is readily discernible that the same process is still applicable, where representatives from each school meet with similar schools to form composite reports and so on, until a final committee forwards a summary report to the su-

perintendent and the president of the school board.

The suggested evaluative criteria. The evaluative criteria mentioned in describing step one are presented below. The staff member writes in paragraph form under each criterion item a description of his practices, the strengths and weaknesses of such practices, and a list of suggested improvements or plans of action with respect to each question. It is important that all personnel respond to each criterion and that each person understand the implications of each criterion for school practices.

CRITERION I. WAYS OF DETERMINING INDIVIDUAL DIFFERENCES AMONG CHILDREN

(1) Is there a testing and evaluation program in operation in your school which helps you to discover the nature and the degree of differences among children? Describe.

(2) Describe how you use tests and other instruments to plan

your program.

(3) What other ways have you developed for discovering the individual needs, interests, and abilities of children?

(4) Are cumulative records kept on each child and passed on to his next teacher? What do these contain? How used?

CRITERION II. THE RELATIONSHIP OF GOALS AND METHOD IN TEACHING

(1) How are the ideals and the behaviors of democracy taught?

(2) How are children taught to think and to solve problems?

- (3) How do you provide experiences suited to the differing needs of children?
- (4) How does the emotional climate and the class organization help each child develop at a rate consistent with his own maturation and ability?
- (5) How do children in your situation go about learning the basic skills and fundamentals processes?
- (6) How do children contact subject matter in your situation?
- (7) How do you develop behavior controls and discipline among children?
- (8) Is your total performance as a teacher fairly consistent with your educational philosophy? Summarize your philosophy.

CRITERION III. THE SETTING FOR LEARNING

- (1) How do your educational objectives influence the physical arrangement of the classroom?
- (2) Do you participate in the selection of supplies and equipment on the basis of your educational objectives and of the specific needs of children? Explain.
- (3) How do you help children develop increasing responsibility for the wise use of materials, space, and equipment?
- (4) How do you improvise with materials when the desired supplies are not available?
- (5) Do the methods for distribution of supplies and materials as well as the quality of these items facilitate or impede the learning process in your situation? Explain.
- (6) How has the emotional climate of your classroom(s) contributed to the growth and development of your pupils this year? (Write at least one case study).

CRITERION IV. HOME-SCHOOL COMMUNITY RELATIONSHIPS

- (1) In what ways do you regularly meet and consult with parents?
- (2) How do you use the special talents of parents and other residents of the community in the instructional program?
- (3) In what other ways do you use the community as a laboratory for learning?
- (4) Do school programs to which the public is invited utilize the talents of all or most children rather than the gifted few? Explain.

CRITERION V. EVALUATING AND REPORTING PUPIL PROGRESS

(1) How do you help pupils participate in the evaluation of their own progress?

(2) What procedures do you use for securing, recording, and using information about children and their learning?

(3) Typically, what factors do you discuss with parents in your conferences with them?

(4) How does the child participate in reporting his progress to his parents?

(5) Do you use a comparative marking system or an individual progress system for recording evaluations? What advantages would you claim for using one or both in your situation?

The process of staff appraisal. The process of self-evaluation is primarily designed to involve the individual teachers, supervisors, administrators, and other officers in such a way that personal growth and achievement are by-products of a desire to learn more and feel pride in doing a better job. They should have individual and group incentives to advance professionally. Yet, several questions must be answered, particularly for administrators and school board members who have a right to ask these questions: How can we be sure staff members are really improving and are not using the composite report device as a screen for their own inactivity or laziness? Are we in a better position after the program evaluation phase to identify the teacher who deserves promotion or a pay increment? It should be added that not every teacher will show professional improvement. Some will never respond no matter what plan is used to stimulate better performance.

Individual teachers lose their identity when the composite report is first made at the horizontal level. They should not be required to reveal their evaluative comments to any one but colleagues on their own grade level. Teachers should be assured that an exposure of these weaknesses will not be used to rate them or place them on some sort of scale for salary comparative purposes at this point. All staff members should be assured that directions of professional growth, rather than end products, will be given most consideration. Even those who have achieved a reputation as master teachers

will be expected to grow in the profession continuously.

The evaluation of teachers will be made by a committee of professional peers and the building principal. The evaluation of supervisors, principals, counselors, and other officials will be made by

committees composed of teachers and administrative personnel. Composition of evaluation committees for teachers will change at each level. Peers will be chosen from both the same school unit and from other distant school units. The principal will serve on all such committees.

When an individual is invited to a conference with an evaluation committee, the discussion will emphasize the part the individual is playing in implementing the suggestions for improvement as summarized by the reports of the horizontal committee of the program evaluation in which the individual was involved, supplemented or amended by the subsequent reports of vertical committees and the central committee report of that particular school or school system. However, any items appearing in the evaluative criteria may be used to question the individual. Further, the individual may be expected to show the evaluating committee tangible results. Ideally, if a teacher is being evaluated, the conference should take place in the teacher's classroom. Here the teacher can show children's work, materials, and other effects of his efforts to implement the school program. The committee may wish to visit the class when teaching is going on with children. This should be considered a normal rather than an exceptional feature of the process. The teacher identifies actual classroom practices that have exemplified changes as a result of the self-evaluation studies. Perhaps action research projects are discussed, indicating how thinking and behavior may be changed. Demonstrations, displays, or other concrete manifestations are viewed in light of educational objectives or methods, which further suggest how practices may reflect caliber of performance, directly or indirectly traceable to the self-evaluation process. The teacher may identify any particular project or activity, both within the school environment and the community that suggests how it contributes to professional improvement. Perhaps the self-evaluation program led to some sort of study group, experimentation, or activity in the community itself. In some definite way, the teacher should be able to show something that means better classroom work, either now or in the future.

Always, the evaluating committee is interested in how the staff member is working and planning for improvement in terms of the sharing and common understanding which developed during the coöperative evaluation of the program. The individual is not judged on the weaknesses revealed at that time but on the improvements in the program decided upon in the group. Thus, each individual is given time to adjust to the situation, to develop insight into what group expectancies are, and to change ways of many sub-groups of the whole; principals, supervisors, consultants, and counselors help the whole staff to move forward as a group toward the worth-while goals emerging from educational research and the related behavioral sciences. Rank and file members inevitably should contribute much toward the same end. Good practices will tend to spread throughout the school system. Poor practices, critically analyzed by the group, will tend to wither away.

Each local school district should determine its own way of arriving at the number of staff members who will receive merit raises in salary as well as the amount of such increments. These matters will vary with the ability of the locality to pay. It is recommended that the evaluation not be reduced to manipulation of a rating scale yielding a numerical score. After the evaluating committee has examined all evidence desired, it should give each individual a general effectiveness rating; these should be reported to the school

board in the following classifications:

Superior, demonstrates continuous professional growth.
 Competent, demonstrates continuous professional growth.

(3) Competent, is on plateau of professional growth.

(4) Fair, is trying to improve.

(5) Fair, demonstrates little desire to improve.

(6) Provisional, is trying to improve.

(7) Provisional, demonstrates little desire to improve.

(8) Questionable, demonstrates little fitness for the position.

A school board may, if it desires, graduate its increments in terms of these classifications. If across-the-board merit raises are to be given to a definite number of individuals, the school board will decide on the cutting point after the evaluations have been reported. Care should be exercised in the orientation period of the whole project of coöperative self-evaluation to emphasize that Classification No. 1, "Superior," should be reserved for only a few persons in each school. Probably, this rating should be reserved, also, for staff members with at least five years of experience to give added incentive to career teachers and to encourage more persons to remain in the profession. However, boards of education should be encouraged to reward individuals who fall into classifications two, three, and four. The individual should be evaluated each year.

No individual will have "arrived" for all time when he receives a top rating. It is expected that individuals will vary with respect to these classifications from year to year. Increments would not be automatic in this system of evaluation.

These classifications of professional proficiency may be used for all professional personnel, including administrators. The total program of coöperative self-evaluation ensures democratic relationships, and promotes democratic leadership on the part of administrators and supervisors. It unifies the whole staff around commonly understood criteria of educational excellence and operates as fairly as humanity can make it.

In conclusion, the simple check list procedure of rating a teacher should be discarded. Teachers must know that their revelation of weaknesses during self-evaluation of the program will not cause them to lose face, nor harm their standing in any way. Teachers cannot be compared in terms of how much they produce, as the factory worker on the assembly line. Yet, they are realistic enough to know that good performance and conscientious efforts backed by results should bring additional rewards. The difficulty is in identifying the good teacher in a fair and equitable way that in turn does not produce anxieties detrimental to morale and mental health. It is believed that a coöperative self-evaluation program does give intrinsic motivation for self-improvement. A coöperative self-evaluation program is the answer not only for identifying better teachers, but it is surely the road to advancement of the profession as teachers and other educational workers work together to find better ways of helping children in the classroom.

CURRENT THEORY AND PRACTICE IN CON-NECTION WITH THE FUNCTION OF THE CAMPUS LABORATORY SCHOOL

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What is and what should be the function of the campus laboratory school is an obvious question of rather extensive, lengthy, and heated debate if one reads the current literature and participates in the meetings of such groups as the laboratory school principals sponsored by the National Association of Elementary School Principals.

Much of the controversy seems to revolve around two points. First, the present function of such schools, and secondly, the extent of agreement or disagreement between what several influential educational organizations have proposed in this connection and what is to be found in actual practice in the campus laboratory schools of this country.

HISTORICAL EVOLUTION

The maintenance of a campus school can be well documented as one of the oldest practices still to be found in many modern teacher training institutions (1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12). The same documentation also affords a good knowledge of the purposes intended for such schools. These include the functions of demonstration, observation, student teaching, leadership, participation, and experimentation.

It is clear from such sources that the schools were historically intended to have many purposes. History also records that regardless of the many well-intentioned purposes, the use of the facilities for student teaching soon becomes the primary, if not sole, purpose of many of the schools

Roughly ten years ago, beginning with the post-war boom of G.I. students, the teachers colleges found themselves unable to satisfy all the demands made upon their campus schools for student teaching. As if to justify the continued existence of such schools, a new emphasis upon the use of the campus school for experimenta-

tion, and for demonstration and observation was made by many educators.

STANDARDS AND PRONOUNCEMENTS

The American Association of Colleges for Teacher Education revised in 1952 (13) their Standards and Policies for Accrediting Colleges for Teacher Education. The complete listing of standards is too lengthy to be included here, but Part F., Facilities Needed to Implement the Program of Professional Laboratory Experiences, of Standard VI contains the statement that:

There is need for laboratory facilities sufficiently extensive to provide for each student contact with "normal" situations, varied enough to provide contacts with different pupil groups and different curriculum and administrative organizations, and located for student convenience and staff accessibility. This aspect of the standard is implemented most fully:

(1) When one or more college-controlled schools are available. . . .

(2) When a range of other school situations is available. No one can provide the needed range of experiences with children of varied socio-economic backgrounds, with different major educational philosophies, with varied types of instructional materials, with different patterns of administrative organizations.

The foregoing statements give the impression that although the Association favors the maintenance of "college-controlled" schools, it also recognizes the need for a wider range of "other school situations" to overcome the certain implied and stated limitations in the former schools.

The Association for Student Teaching devoted its entire 34th Yearbook to a study of the functions of the laboratory school in teacher education (14). Although the Yearbook contains the opinions and findings of many authorities, it seems to be the general consensus that the functions of the laboratory school should be: (1) observation and demonstration, (2) participation, (3) research, (4) leadership, and (5) to a lesser degree than previously used, student teaching. It is fairly safe to conclude from an examination of these functions that the Association for Student Teaching intends that the student teaching function be a minor function of the campus school.

Caswell (15) in a speech delivered at the annual meeting of the Association for Student Teaching in St. Louis in 1949, declared that the campus school should retain its customary rôle, but with special emphasis upon observation and participation. The student teaching function, in his estimation, should be largely carried on in coöperating public schools. He also stated that the type of experimentation "so planned and evaluated as to be of general significance to American education... and which is quite different from that designed to improve practice in the participating school," (16) should be curtailed. While this may appear to be a blanket indictment of experimentation in the campus laboratory school, closer examination shows that the disapproval was intended for only that type of experimentation as exemplified by the Horace Mann-Lincoln School of Teachers College, Columbia University.

Typical of the studies that have been done on the local or regional level is the one done by Ashmore (17). He found in his study of the state-supported campus laboratory schools in selected Southeastern states that the large majority of such schools were not being used extensively for purposes of providing student-teaching experiences.

He states that:

Moreover, many studies conducted recently indicate that there is a widespread trend throughout the United States toward the use of off-campus facilities for student-teaching purposes. . . .

The evidence presented would lead to the conclusion that the primary function of the laboratory school should be that of demonstration and participation with the second major function being that of experimentation (18).

CURRENT FUNCTIONS AS ILLUSTRATED BY AUTHOR'S STUDY

The author's study (19) had as its primary purpose the analysis of current practice in ten areas as exhibited by the campus secondary schools maintained by publicly controlled institutions of higher learning as a part of their program of teacher education. The use made of the school was one of the ten areas analyzed. The data were obtained from a questionnaire completed by the administrative head of seventy-five of the eighty such campus schools that qualified under the delimitations.

The primary and secondary uses that were made of the seventy-

five campus schools are shown in Table I.

The data indicate that student teaching was regarded as the primary function of the school by approximately seventy-one per cent of the principals. Three principals indicated that student teaching was the primary function at the present, but that it was the intention of the institution to proceed in the direction of off-campus student teaching sometime in the near future.

TABLE I.—THE NUMBER AND PER CENT OF SEVENTY-FIVE CAMPUS
SECONDARY SCHOOLS CLASSIFIED ACCORDING TO THE PRIMARY
AND SECONDARY USES MADE OF THESE SCHOOLS

Purpose	Use			
	Primary*		Secondary	
	(N)	(%)	(N)	(%)
Demonstration and observa-	32	42.7	39	52.0
tion Experimentation and research	6	8.0	49	65.3
Student teaching	53	70.7	17	22.7
Leadership rôle in secondary education	7	9.3	45	60.0
Public high school	1	1.0		1.0
Participation	2	2.7	1	1.0
Other			1	1.0

^{*} The totals for the number and per cent are more than seventy-five and one hundred respectively because twenty-one respondents indicated a multiple primary use.

Demonstration and observation was the only other purpose that assumed major importance as a primary use. Thirty-two principals indicated that this was a major function. The other functions were all chosen to a much smaller degree; none of them marked by more than ten per cent of the persons who completed the questionnaire.

The principals were in major agreement that the functions of demonstration and observation, experimentation and research, and leadership rôles in secondary education were the most important secondary uses made of the school. All three of these functions were chosen by more than fifty per cent of the principals.

The opinion of fifty-four principals as to the percentage of total use that each function represented is summarized in Table II. Averaging the figures given for student teaching accounted for Averaging the figures given for student teaching accounted for approximately of the school.

Demonstration and observation accounted for approximately twenty-eight per cent of the total use. The figures for these two purposes correlate to a high degree with the information presented purposes received the most support in Table I where the same two purposes received the most support as the primary uses in that table.

It should be remembered that the Associations and authorities previously cited suggested that experimentation and research replace student teaching as a primary function. In order to ascertain the degree to which the laboratory schools were already fulfilling this intention, the principals were asked to supply information regarding such experimentation in their schools.

Table II.—The Average Percentage of Use of the Campus Secondary School Classified According to the Purpose of These Schools

Purpose	Average percentage of use*	
Student teaching	49.2	
Demonstration and observation	27.5	
Experimentation and research	11.1	
Leadership rôle in secondary education Participation	8.6	
Public high school	2.6	
Other	.9	
	.1	

^{*} All percentages based upon the returns from fifty-four schools.

TABLE III.—THE NUMBER AND PER CENT OF CAMPUS SECONDARY SCHOOLS
CLASSIFIED ACCORDING TO THE NUMBER OF EXPERIMENTS OR
RESEARCH STUDIES WHICH HAD BEEN CONDUCTED IN
CONNECTION WITH THE CAMPUS SCHOOL WITHIN
THE LAST TWO YEARS WHICH COULD NOT
HAVE BEEN DONE WITH THE SAME
SUCCESS IN CONNECTION WITH

A Coöperating Public
School

Number of experiments or research studies	Number	Per cent
15-16 13-14	2	3.1
11-12 9-10 7-8 5-6 3-4 1-2 None	1 1 2 3 8 17 31	1.5 1.5 3.1 4.6 12.3 26.2 47.7
Cotal	65	100.0

It can be seen from an examination of Table III that 31 schools, 47.7 per cent of the 65 schools which answered the question, had not conducted any experiments or research studies within the last two years in connection with the campus school that could not have been done with the same success in connection with a coöperating public school. The most such experiments or studies reported was sixteen while the median number reported was .6 experiments or studies.

ANALYSIS OF DATA

Analysis of these data with respect to the recommendations previously given by the American Association of Colleges for Teacher Education and the Association for Student Teaching show several interesting variances. Based upon the returns from 75 campus laboratory schools maintained by publicly supported institutions, 93.8 per cent of all such schools, it would appear that:

(1) The great majority, 70.7 per cent, still regard student teach-

ing as their primary functions.

(2) Demonstration and observation is regarded as a dual primary function by almost half of the schools.

(3) Experimentation as a primary function is of little impor-

tance.

(4) Experimentation as a secondary function has wide surface support, but when compared to actuality has little real meaning.

SUMMARY

The purpose of this article has not been to prove a case for any intended or actual function, but rather to show that for at least a sizable proportion of the campus laboratory schools today, there is a rather wide gulf between what several influential organizations contend should be and what is actual practice in such schools. The divergence of intention and practice is so wide with respect to some functions that a re-evaluation of thinking would seem to be in order.

In summary the data would seem to show that the campus school movement will be faced with several problems in the near future that may threaten its very existence. The increase in college enrollments will almost of necessity demand either an expansion of facilities and staff if the functions presently in vogue are to continue, or a rather drastic shift in thinking on the part of all con-

cerned as to the primary function of the school. The only alternative would seem to be a continuance of the present situation with regard to function and facilities with a corresponding decrease in the effectiveness of the campus school. Such a prospect is not particularly palatable to anyone interested in the place of the campus school in the future of teacher training.

REFERENCES

(1) Ned H. Dearborn, The Oswego Movement In American Education.

New York: Teachers College, Columbia University, 1925.

(2) Edward S. Evenden, "A Quarter Century of Standards," in American Association of Colleges for Teacher Education, First Yearbook of the American Association of Colleges for Teacher Education. Oneonta, New York: The Association, 1948.

(3) Charles A. Harper, A Century of Public Teacher Education. Washing-

ton, D. C.: National Education Association, 1939.

(4) George W. A. Luckey, The Professional Training of Secondary Teachers in the United States. New York: The Macmillan Company, 1903.

(5) Arthur O. Norton, The First State Normal School in America: The Journals of Cyrus Pierce and Mary Swift. Cambridge, Mass.: Harvard University Press, 1926.

(6) Alex F. Perrodin, "The Development of Laboratory Schools in Teacher Education," in The Association for Student Teaching, Functions of Laboratory Schools in Teacher Education. Thirty-Fourth Yearbook. Lock Haven, Pa.: The Association, 1955.

(7) John A. Ramseyer, A Study of School Improvement With Emphasis Upon the Rôle of the Laboratory School. Unpublished Doctoral Dissertation.

Ohio State University, Columbus, 1948.

(8) Harold Rugg and George S. Counts, "A Critical Analysis of Current Methods of Curriculum Making," in National Society for the Study of Education, Curriculum Making. Twenty-Sixth Yearbook, Part I, Chapter XXX. Chicago: The Society, 1927.

(9) Harold Rugg and James E. Russell, Teachers College Record, Vol. 3,

p. 1, January 1902.

(10) Heber H. Ryan, "A Century of Laboratory Schools," Junior-Senior High School Clearing-House, Vol. IV, November 1929.

(11) Mason S. Stone, "The First Normal School In America," Teachers

College Record, Vol. 24, p. 263, May 1923.

- (12) Edward I. F. Williams, The Actual and Potential Use of Laboratory Schools. New York: Bureau of Publications, Teachers College, Columbia
- (13) American Association of Colleges for Teacher Education, Revised Standards and Policies for Accrediting Colleges for Teacher Education of the American Association of Colleges for Teacher Education. Oneonta, New York: The Association, 1952.

(14) Association for Student Teaching, Function of Laboratory Schools in Teacher Education. Thirty-Fourth Yearbook. Lock Haven, Pa.: The Association, 1955.

(15) Hollis L. Caswell, "Place of the Campus Laboratory School in the Education of Teachers," Teachers College Record, 50: 441-50, April 1949.

(16) Ibid., p. 448.

(17) Henry L. Ashmore, "Evaluation of State-Supported Campus Laboratory Schools in Selected Southeastern States," Educational Administration and Supervision, February 1951.

(18) Ibid., p. 90.

(19) Duaine C. Lang, An Analysis of the Campus Secondary Schools Maintained By Public Institutions. Unpublished Doctoral Dissertation. University of Nebraska, Lincoln, 1957.

EQUAL EDUCATIONAL OPPORTUNITY— AN AMERICAN MYTH

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Public schools are supported by general taxation for the purpose of educating all of the citizenry so as to maintain and strengthen our American way of life. As so appropriately expressed by Briggs:

Other forms of government may maintain themselves and even temporarily prosper with education limited to the few who direct and drive a vulgar populace; but in a democracy, where one vote counts for as much as another, where success is dependent upon unit citizens all sufficiently intelligent and trained to evaluate and act wisely on their information, popular education is imperative. This statement needs no defense, so generally is it accepted (1).

Since Americans have recognized education as the foundation of our democracy, it follows that all children should be guaranteed equal educational opportunity. Some concern may be expressed over the use of the term "equal educational opportunity." This does not mean that all children will be guaranteed the same education. Equal educational opportunity means the chance for the type of education that will benefit each child to the utmost, based upon his ability, interests, and needs. This concept of equality of educational opportunity has been well stated by Beard: "All are entitled to the fullest possible educational opportunity. . . . It is also agreed that this opportunity should be limited in time and nature only by the ability of the individual to profit from its benefits (2)." Counts wrote: "It must be maintained that the idea of equality of educational opportunity does not mean sameness of opportunity nor does it mean necessarily equality in years of educational experience. The endowment of the individual must be recognized in each case (3),"

Most Americans believe that the public schools are equally available to all children, but there is a great deal of evidence showing that the schools of this nation are not cost-free institutions, and thus not equally available to all youth of school age. The Youth Commission of the American Council of Education reported:

Everywhere there is ample evidence, though not as widely known and pondered as it ought to be, to the effect that attendance at high school and junior college is conditioned very largely upon the economic status of the

family from which the pupil comes. . . .

Many of our most valuable activities of the school are still called extracurricular, and are maintained not out of public funds, but only through more or less obligatory contributions from pupils and such other means as sales of admission tickets. Often, it is necessary for the pupil to purchase his own equipment for participation in these activities. Pupils possessing no money for these purposes are generally denied access to many of the most fruitful and stimulating experiences in the school career, and are effectively assigned to a lower social class even by associates of their own age. Not infrequently this deprivation of status contributes to a feeling of dissatisfaction and distaste which is the actual cause for leaving school (4).

The Youth Commission here referred only to extra-curricular activites. How much worse the situation is if it can be demonstrated

that the same is true for regular class activities.

While it must be recognized that there are many factors which contribute to keeping children from attending school, economic status should not be such a determinant. Numerous research studies which have been conducted since the turn of the present century on why children leave school before graduation stress the importance of the economic factor. In 1916 Holley noticed a strong relationship existing between persistence in school and home conditions. He suggested at that time that low economic status is probably an important factor in early elimination (5).

An extensive study of the selective character of the secondary school was conducted by Counts in 1922. His finding, similar to those of Holley, revealed a close relationship between parental occupation and the privileges of secondary education. He found, in the schools included in this study, that there were approximately sixty seniors to every one hundred freshmen from the homes of professional workers and that there were approximately twelve seniors to every one hundred freshmen from the homes of common laborers. Counts concluded, "In a very large measure participation in the privileges of secondary education is contingent on social and economic factors (6)."

In 1933 Kefauver, Noll, and Drake conducted a follow-up study in two of the four cities used by Counts. They found that the upper and lower occupational levels were actually farther apart in the proportion of children of high school age who were enrolled in high school than they had been eleven years earlier; no marked progress toward economic democratization of the schools had taken place (7).

Bell's study in 1938 of 13,528 youth in Maryland of whom 10,898 were out of school showed that children born to families in the topmost economic groups continued in school beyond the eighth grade with a relative frequency eleven times as great as that observed for those children who came from families in the lower end of the family income scale. He also found that only one of every ten of the relatively few economically underprivileged youth who get into high school actually continue on to graduation. In sharp contrast, he found that eight out of every ten of the youth from the top income group graduated.

With a little professional license, one might consider the factors that influence grade attainment as a miniature deck of cards. However this deck is shuffled, one card—one fact—will always be on top; the strongest single factor in determining how far a youth goes in school is the occupation of his father (8).

Bell calls to our attention the vicious cycle in which the lower income groups find themselves due to this selectivity.

The grade attained in school by an individual determines the type of job he secures. The type of job he secures determines the income he receives. The amount of income he receives determines the grade in school to be attained by his children, which indicates the type of job they will get, the amount of income they will receive, the length of time their children will remain in school, and so on and on (θ) .

The findings of the New York State Regents' Inquiry are in substantial agreement with those reported by Bell. Eckert and Marshall found that students coming from poor families have much less chance of educational survival than do students coming from families of higher economic status. They reported that one out of every two students withdrawing from school belonged to families classified as poor or indigent, while only one out of twenty students withdrawing from school came from homes classified as comfortable or wealthy (10).

Eckert and Marshall concluded:

On the average, the poorer the student is, the sooner he will leave school. Those who most desperately need what the school might offer because of their circumscribed home backgrounds and their limited ability to learn directly from experience are the least likely at the present time to receive it (11).

Other studies in close agreement with those already cited have been carried on by Lovejoy (12), Updegraff (13), Punke (14), Palmer (15), Richey (16), Karpinos (17), Warner, et al. (18), Johnson and Legg (19) and Nancarrow (20).

SUMMARY AND RECOMMENDATIONS

It is evident from the studies cited that in a very large measure participation in the privileges of a secondary education is contingent on economic status. The lower the economic status of the child's family, the less is the likelihood that he will get into high school, and once enrolled, continue on to graduation. As long as this condition exists, the principle of equal educational opportunity is negated.

To help eliminate some of the unnecessary costs which may tend to drive out the children from the lower income groups, it is recom-

mended that:

(1) School officials guard against offering a program which cannot be adequately financed through taxation. It might be better to eliminate some of the more expensive activities conducted by the schools than to impose conditions of costs which make it impossible for children of the lower-income groups to participate.

(2) School officials, working with teachers and other interested persons, evaluate co-curricular activities in terms of their educational value, eliminating those activities found to be of little or no

educational value.

(3) School officials and school personnel make a careful study of many of the expensive customs which have been allowed to continue through the years which are of little or no educational value. Examples of these are customs associated with class membership, school fashions, and commencement.

REFERENCES

(1) Thomas H. Briggs, The Great Investment. Cambridge: Harvard Uni-

versity Press, 1930, p. 10.

(2) Charles A. Beard, A Charter for the Social Sciences in the Schools, Part I, Report of the Commission on the Social Studies, American Historical Association. New York: Charles Scribner's Sons, 1952, p. 64.

(3) George S. Counts, The Selective Character of American Education.

Chicago University Press, 1922, p. 149.

(4) American Council on Education, Youth and the Future, The General Report of the American Youth Commission. Washington, D. C.: American Council on Education, 1942, pp. 121-22.

(5) Charles E. Holley, The Relationship Between Persistence in School and Home Conditions, Part II, The Fifteenth Yearbook of the National Society for the Study of Education. Bloomington, Indiana: Public School Publishing Company, 1916, p. 110.

(6) Counts, The Selective Character of American Education, p. 149.

(7) Grayson Kefauver, Victor Noll, and Elwood Drake, The Secondary School Population, Bulletin No. 17, National Survey of Secondary Education. Washington, D. C.: United States Printing Office, 1938, pp. 11-16.

(8) Howard Bell, Youth Tell Their Story, American Youth Council. Wash-

ington, D. C.: American Council on Education, 1938, pp. 61-63.

(10) Ruth Eckert and Thomas Marshall, When Youth Leave School. New York: McGraw-Hill Book Company, 1938, p. 72. (11) Ibid., p. 93.

- (12) Gordon Lovejoy, Path to Maturity, Cooperative Personnel Study. Chapel Hill: University of North Carolina Press, 1940.
- (13) Harlen Updegraff, Inventory of Youth in Pennsylvania, American Youth Commission. Washington, D. C.: American Council on Education,
- (14) Harold Punke, "Home and Family Background of High School Pupils," School Review, XLIV (October, 1936), 597-607.
- (15) Emily Palmer, Pupils Who Leave School, Division of Vocational Education, Bulletin No. 24, Series No. 17. Berkeley: University of California, 1930.
- (16) Herman Richey, "Factors of High School Enrollment in Illinois," School Review, XLVIII (November, 1940), 657-666.
- (17) Bernard Karpinos, "School Attendance as Affected by Prevailing Socio-Economic Factors," School Review LI (January, 1943), 39-49.
- (18) Lloyd Warner, et al., Who Shall be Educated? The Challenge of Unequal Opportunity. New York; Harper and Brothers, 1944.
- (19) Elizabeth Johnson and Caroline Legg, "Why Young People Leave School," Bulletin, National Association of Secondary School Principals, XXXVI (October, 1952), 143-149.
- (20) James Nancarrow, "Reducing Drop-Outs," Bulletin, National Association of Secondary School Principals, XXIV (December, 1950), 183-188.

LEARN TO SPELL FIRST WORDS FIRST

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Practically everyone is suspicious of and dissatisfied with spelling instruction in this day and age. It goes without saying that the high school teacher is concerned about the student who enters high school with a spelling handicap. The businessman who employs a high school graduate cries out in anguish, "Why don't they teach spelling anymore?" The scientists have given their pronouncements that students unable to read, write or spell well cannot get the benefits a science course is supposed to give. What is more alarming in this Sputnik age is that students with such deficiencies are frightened away from such courses. Even the men who run our newspapers are speaking out about the training in spelling for students of journalism, who supposedly would be less badgered by a spelling handicap. Says E. B. Hunter² of *The Charlotte Observer*: "Teach students how to gather news, write concisely and above all how to spell ordinary (italics ours) words."

Despite the acknowledgment of teachers and the general public that there is a spelling problem, few high schools and colleges have instituted a systematic program to improve spelling. Some schools have a single remedial teacher who pulls the retarded speller from a regular subject class several times a week. Most schools urge teachers to correct slipshod writing and careless spelling. This practice too results in limited success, for few high school and college teachers are trained to teach spelling.

Although there is general agreement among experts that spelling "disability" is much more common than it once was thought to be, it is of consolation to know that the number of spelling troubles, not only at the elementary level, but also at the secondary and college levels, is limited to a few ordinary words. An elementary list of spelling demons³ consists of about two hundred words; a high

¹ Kenneth B. M. Crooks, "Reading and Science Instruction," The American Biology Teacher, 19: 135-143, May, 1957.

² As quoted by E. L. Callihan in *Grammer for Journalists*. New York: The Ronald Press Company, 1957, p. 346.

^a James A. Fitzgerald, 222 Spelling Demons. Milwaukee; The Bruce Publishing company, 1941.

school list, of about the same number.4 Thomas Clark Pollock, former president of the National Council of Teachers of English, made a study of the spelling errors which college students actually make in their writing; he found that most of the actual cases of misspelling, as distinct from the different words misspelled, came from difficulties with a comparatively few words.5

Recently the present writers made a study of the ordinary words which are considered spelling demons for secondary school and college students. By way of explanation, it may be stated that a critical core of words, sometimes known as "spelling demons," consists of the most important and the most often misspelled words at

a designated level of instruction.

In analyzing misspellings common to high school and college students, the writers checked two lists of words commonly misspelled by high school students against Pollock's list of words most frequently misspelled by college students. They found seventynine words common to three lists; i.e., the Corbin-Perrin, the Shostak-Van Steenbergh lists of words commonly misspelled by high school students, and the Pollock list of words commonly misspelled by college students.

These seventy-nine words were then checked against a shorter list by Pollock, one consisting of thirty-one words or word groups commonly misspelled by 7th, 8th, and 12th graders and by college students. Eighteen of the entries on Pollock's list of thirty-one words or word groups were already on our list of seventy-nine. One of those eighteen entries was their, there, they're. Since we had found their common to the two high school lists and the one college list, we already had that word on our list. It seemed justifiable, since Pollock's finding was that there and they're are commonly misspelled by high school and college students, to add those two words to the list of seventy-nine, making eighty-one. The thirteen entries remaining, or 17 words, we added to our list of eighty-one. Those words are: (1) acquaint, (2) benefit, (3) decision, (4) gov-

⁵ Thomas Clark Pollock, "Spelling Report," College English, 16: 102-109, November, 1954.

⁴ Edna L. Furness and Gertrude A. Boyd, "231 Real Spelling Demons for Secondary School Students," The English Journal, 47: 267-270, May, 1958.

Richard K. Corbin and Porter G. Perrin, Guide to Modern English. Chicago: Scott, Foresman and Company, 1955, pp. 492-494; Jerome Shostak and Shirer Van Steenbergh, Spelling. New York: Oxford Book Company, 1949, pp. 7-9.

ernment, (5) interest, (6) it's—its, (7) lose, (8) occasion, (9) realize, (10) studying, (11) to—too—two, (12) tries, (13) weather—whether. Thus we arrived at a total of 98 spelling demons common to high school and college students.

As a next step the writers checked this list of ninety-eight against Horn's Basic Writing Vocabulary for adults. Only three words commonly misspelled by high school and college students, Britain, they're, villain, were not included in the Horn Vocabulary.

In the chart which follows, the figure (1a, etc.) shows the location of the ninety-five remaining words or spelling demons on Horn's list. For example, the word appreciate appears in the first five hundred words of Horn's study; the word beginning appears in the second five hundred: and the word discipline appears in the sixth thousand. In studying the table, the reader will note that 62 of the 98 words commonly misspelled at the high school and college levels are among the first two thousand words most commonly used in adult writing: 1a (21 words), 1b (11 words), 2a (19 words), and 2b (11 words).

A further breakdown of the distribution is as follows: four spelling demons fall, according to Horn, under 3a (2001–2500), meaning that they are in the first five hundred of the third thousand. The four words in 3b are in the second five hundred of the third thousand; 11 words are in the fourth thousand (6 words under 4a, and 5 words under 4b); two each are found in the fifth (4001–5000), the seventh (6001–7000), the ninth (8001–9000), and the tenth thousand (9001–10,000); and 3 each in the sixth (5001–6000) and the eighth (7001–8000) thousand.

NINETY-FIVE SPELLING DEMONS COMMON TO HIGH SCHOOL AND COLLEGE STUDENTS CLASSIFIED ACCORDING TO HORN'S Basic Writing Vocabulary for Adults

1b (501-1000)

4 (4 E00)		
1a (1-500)	beginning	
appreciate	certain	
believe	especially	
business	experience	
coming	government	
different	knowledge	
friend	opinion	
interest	Opinion	

⁷ Ernest Horn, A Basic Writing Vocabulary: 10,000 Words Most Commonly Used in Writing. Iowa City: College of Education, University of Iowa, 1926.

		and isoper cason	
its			
necessary		original	
opportunity		realize	
paid		separate	
probably		similar	11
receive			
their			
there			
to			
too			
two			
weather			
whether			
writing	0.		
2a (1001–1500)	21		
benefit (1001-1500)		2b (1501-2000)	
decision		all right	
definitely		familiar	
description		forty	
excellent		guarantee	
extremely		it's	
finally		laid	
foreign		occurred	
fourth		planned	
immediately		privilege	
lose		schedule	
		speech	11
meant		-Poort	11
naturally occasion			
-			
quiet			
recommend			
studying			
surprise			
usually	19		
3a (2001-2500)		01. (0504 0000)	
appearance		3b (2501–3000)	
criticism		accommodate	
equipped		argument	
marriage	4	disappoint	
4a (3001-3500)	•	independent	4
conscience		4b (3501–4000)	
divine		conscious	
interfere		grammar	
mathematics		hungry	
possess		laboratory	-
psychology	6	ninety	5
5a (4001–4500)	•		
tragedy	1	5b (4501–5000)	1
	*	fundamental	T

Lear	n to Spell I	First Words First	ออ
6 (5001-6000) discipline sophomore tries 8 (7001-8000) amateur	3	7 (6001-7000) acquaint repetition 9 (8001-9000) accidentally disastrous	2
parallel seize	3 10 (900	1–10,000)	
	noticeable embarrass	2	

BOOK REVIEWS

James E. Wert, Charles O. Neidt, and J. Stanley Ahmann. Statistical Methods in Educational and Psychological Research. New York: Appleton-Century-Crofts, Inc., 1954. Pp. vii + 435.

Intended to illustrate both the application and interpretation of statistical methods that are involved in educational and psychological research and to furnish a background of techniques in advanced courses in statistical theory and methodology, Statistical Methods in Educational and Psychological Research approximates its objectives in a somewhat disappointing manner. It would appear that its most useful function will be that of a reference volume, once its reader has gained familiarity with statistical procedures largely from the study of other texts in statistics. The greatest limitations would appear to be its unevenness in clarity of exposition particularly from the standpoint of explicit formulation of the rationale of statistical inference and the absence of easily followed step-by-step computational procedures especially in the areas of analysis of variance, discriminant analysis, and regression techniques.

In reading the text one often wonders what line of reasoning underlies the selection of a particular method, where the reference for a given statistical procedure could be found, why a given step follows from the previous material presented, or what the definition is for a symbol suddenly introduced. A number of somewhat misleading and/or debatable statements are to be found such as the interpretation of the standard error of the mean (p. 98), the making of t-tests subsequent to significance F-tests (p. 183), the use of the point biserial coefficient in item analysis (p. 314), the limited consideration given to selection of the denominator for the F-test in analysis of variance (p. 196), or the introduction of the symbol v in discriminant analysis (p. 265), the meaning of which is highly ambiguous. (No consideration is given to the various types of random variables or fixed constants models in analysis of variance that are available.) Both experienced instructors in educational statistics and mature students have complained to the reviewer that they were simply unable to follow the discussion upon the discriminant equation (pp. 263-271) even after having read

and understood detailed treatments in other texts or in journal articles.

It may well be that the authors have attempted to include too much material and have thus had to be somewhat superficial or ambiguous at certain points to save space. However, it is noteworthy that nonparametric methods, some of which would probably be of greater use to many of the readers than are several of the topics considered, are not mentioned. Useful as certain sections may be, it would seem that the student in either beginning or intermediate statistics would be able to gain more per unit of time spent in reading several of the recent texts in the field such as those by Garrett, Guilford, Edwards, Walker and Lev, or Dixon and Massey. It would appear that an early revision of the test would be the only answer to bringing forth a volume that can serve the purposes that the authors have stated in the preface. Eminently well qualified to write a text fulfilling their objectives, the authors, it is hoped, have already started the necessary work.

WILLIAM B. MICHAEL

University of Southern California

PETER PALMER MICKELSON AND KENNETH H. HANSEN. Elementary School Administration. McGraw-Hill Book Co., Inc., 1957. 335 + i-xi pages, \$5.25.

This is another well-written book for beginners in the work of administering elementary schools. The editor, Dr. Harold Benjamin, has some commendatory remarks and is aware of old plans such as the Quincy, Pueblo, Cambridge, Batavia, and other plansplans which now seem old, but which are again being urged by the many "reformers" of our public schools. The book is for beginners.

This volume includes sixteen chapters, preface, and index. The chapters cover a wide range of tasks of the administrator. Chapter I defines the elementary school, provides a very inadequate background of its origin, and then identifies three areas of objectives: learning the cultural heritage; individual development; group living. The six universal characteristics of elementary education in our nation, as given by Edgar W. Knight, are listed. A little introduction in this chapter is given to state, local control, and the school-community. The accompanying readings deal with periodicals, history of education, and a few standard writings.

Chapters II and III describe the principal's duties, and indicate his relations to the system and the community, and give appropriate emphasis to the rôle of leader. The references do not include some of the best-known books in this field; for example, Kyte's volume. The changing character of education described will give the neophyte some idea of what his (or her) leadership must face. Chapter IV is the time-honored theme of the routines of school management presented in terms of a beginner's needs. Such matters as first day, office, supplies, etc., are given substance.

One idea usually omitted from such books is the appropriate utilization of secretarial help. However, the writers are silent on how to get such help if the school has no secretary—and many are in that status.

In Chapters V to VIII inclusive, the principal's work dealing with the school's job—education of children—is outlined. First, as to the instructional leadership. Next, as to the curriculum and what it can be. Third, as to what he (or she) is to do about instructional materials. Fourth, as to the learning processes—but not much as to growth and development.

These chapters require the elementary principal to be acquainted with knowledge of the learning process, the nature and services of guidance and evaluation, to have a philosophy of the curriculum, to have a broad concept of nature and use of materials, to help teachers obtain and use them effectively. On the matter of grouping of pupils, the writers apply their knowledge of children and indicate that the present demands for "tracks" for different groups are hardly adequate. Citing injury to children from failure to promote brings to light the truth of this problem—which should be better known by the critics. The subject of reports to parents is given good treatment. The four chapters have recent references and, as in other sections, series of exercises for further study and discussion.

The school and community relations are identified well. Chapter X on "Working with Parents" is excellent. Would that many school staffs do as the writers indicate? They accept the concept that the child is educated by school, home and other agencies—and that parents and schools must work together.

The pictorial illustrations will help the beginner to realize the real nature of this coöperation. The writers' listing of kinds of meetings to elicit more vists from parents and more coöperation will help also (p. 197). The rôle of PTA is described, as is the rare variation from that rôle.

The material on the principal's relations to his staff, both professional and otherwise, is important. The last paragraph should have been the first, for upon this idea rests the foundation for successful staff relations. The morale of the entire staff-teachers, bus drivers, et al., depends upon the sincerity and practice of the principal in respecting each one for his potential contribution, for using his own resources to find and use the resources in a cooperative attack upon all school problems. The topics presented are: group consideration and action; use of individuals in their appropriate leadership functions; giving recognition to one and all for what they do; doing a good job in schedule, in sick leave, in substitute teacher plans, in helping with salaries and other financial items; obtaining and helping in the use of materials and equipment; doing the necessary work in building membership in teachers' associations, finding candidates for replacements of staff; and maintaining a high level of handling discharges of ill-adapted persons these and many other matters help much to build and maintain morale. To continually tell teachers "I'll take the matter under consideration" just destroys the best of working relations. To promise by implication or specifically that certain things will be done and then fail to do them is the "best" way to get teachers to have little or no confidence in their leader.

Perhaps something should have been said about the principal's function in helping youth to become interested in teaching as a career, more through the professional associations than in the elementary school. The difficult problem of finding and using adequate substitute teachers should have been given more attention than a reference at the chapter's end. And what a principal to the candidate for a position in a school is so important that it should be a matter of record.

The helpful treatment of moral and spiritual values in the elementary school is important and is sometimes omitted from such books. Perhaps in addition to this material, the authors should have been more specific in telling the principal that learning to live the good life is controlled by the same laws of learning as other

learning; and that after an idea is acquired or sometimes before, action must be provided to carry the idea into actual life. This is a high responsibility. In this realm, the reviewer suggests that the principal lead in ascertaining what the school can and does do and then keep home and church informed. That then leaves to them the task of directing the parts of such a learning program as are not within the area of public school education. The authors' suggestions should help both principal and teacher.

The beginner will find Chapter XIII on special services of the school a rich source. The whole group of such services is to be developed coöperatively and this applies even to playground rules. Coöperative problem-solving serves as the means of achieving these ends. Again for the principal in a school with little or no library the authors have no suggestion as to what he can do about

that problem.

The chapter on the school plant is of good quality. It, in common with much of today's material on plants for schools, assumes that much is to be provided. This is sometimes a real mistake. The reviewer recalls a case in which an elementary school was presented with an excellent armillary sphere for help in teaching geography. It had possibilities also in mathematics. But it was stored in a closet and finally broken to pieces by children in a school in which teachers and principal had no idea of what it was or how it could be used. In these days, our staff of the elementary school still has a few such teachers. Why provide the material for such waste? Let us educate these teachers and principals in the effective utilization of equipment and materials and then make provision.

The last chapter, "The Career of the Principal," should inspire the beginner with ideals for great things ahead in his chosen field of work. The reviewer suggests that this career is one of the most rewarding in the whole educational system and hopes that more

men will find it so.

The book is well edited and printed, and contains very few errors. No principal should assume that this is a complete treatment of the area of service. The authors do not intend it so. Any principal should add to this with more specialized study of the parts of the total job. He will find it stimulating and most satisfying.

A. R. MEAD

Hubert H. Mills and Harl R. Douglass. Teaching in High School. The Ronald Press, 1957. Rev. Ed. pp. 516 + iv. \$5.75.

Here is a new edition of Dr. Douglass' well-known volume. It includes twenty-eight chapters, a preface, and an index. Each chapter has well-selected references. In general, it is a rich cross-section of the materials about high school teaching brought up to date.

Chapters One and Two introduce the reader to the rest of the book. The third chapter deals with "What is the effective teacher?" Numbers four to seven present in considerable detail materials about high school students and their characteristics. Then eight to twenty-six describe well the teaching functions of a modern high school. The final chapters give the teacher a view of needed growth in service and his professional relations and problems. They begin by a short comparison of modern versus earlier teaching, which could be read by the present critics with profit. The total volume is a rich body of materials dealing with the developments from routine, severe and rigid "discipline" and lack of understanding of what the task is to achieve, the understanding of the learner and how he learns, and the teacher's rôle in the process to a more comprehensive knowledge, a richer understanding and a wider group of related school practices-not just "busy work" as in the old.

What kind of person is the effective teacher? This is asked by the authors. Not just the question: "Does this teacher know his subject-matter?" as is now being prattled by those who are panicky because they fear and are ignorant in some degree. The authors because they fear and are ignorant in some degree. The authors give a good but not superior view of the materials about what constitutes an effective teacher—from the pupils' view, the parents' constitutes an effective teacher—from the pupils' view, the parents' desires, the administrators' demands and what teachers themselves desires, the administrators' demands and what teachers themselves judge. Here is a very different group of qualities than demanded by judge. Here is a very different group of qualities than demanded by its will surely contain many of the persistent common character-lists will surely contain many of the persistent common character-lists of those teachers who can and do teach at high levels.

What of the high school student—the thousands of boys and girls of adolescent years together with some adults who are obtaining a high school education? In four chapters, the authors provide the reader with details about many of the data dealing with high school population and their backgrounds; the features of

adolescence, the physical growth and maturing of youth, the desires, needs, etc., of these persons. How to get data about them and why a teacher needs to have such data are both well presented. To those teachers who have been subjected—as many have—to psychologists who have little comprehension of the teacher's task, the chapter on learning and motivation will provide help. It is refreshing to find writers who have heard about apperception and who also know something about readiness, but they seem to overlook the identities in the two. Likewise the writers remind all that the problem of "transfer of training" is always a problem and that something can be done about it. This chapter alone will be worth the price of the book. Again, it is encouraging that the book makes clear that high school children grow in many different ways-not just in the "intellectual" aspects of life as some advocates seem to assume. Two very important features of growth are those in attitudes and in problem-solving abilities—both emphasized.

In the treatment of "discipline" the recent developments from hasty, angered, punishments of offenders to a higher level of treatment is described. The authors' cautions about handling misconducts almost preclude any use of the rigid, fear-stimulating, physical punishment practices of the past, and yet if understood will assure worthwhile learning and growth. Perhaps if the authors had shown that growth in ethical behavior is acquired by the same laws of learning and growth as other qualities, many teachers would rid themselves of the ancient superstition that "character is caught, not taught" and then proceed to do nothing about that part of

human growth.

In nineteen chapters, the authors give a wide and balanced treatment of the teachers' functions in a modern high school. Here are the subjects: discipline; directing study; planning preliminary, continuous and cooperative; "telling, practicing, reviewing"; instructional units; selection and use of materials; the core curriculum; audio and visual aids; use of community resources; measurement and evaluation of student growth; marks and reports of growth; and the counseling work of the teacher. The orientation of the new teacher, so often neglected, is stressed. Modern developments in total planning and how to do it are described. One important feature of group planning is potential for development of staff morale. The necessary parts of explanation, and the learners' re-experiencing are given adequate presentation. Thanks for their

emphasis on the appropriate use of textbooks and their limitations, and the teacher's pest—the workbook. Their concept of the core curriculum is the limited one of a rather separate part of the high school program, instead of the "total common experiences of all children." Much of the material on audio and visual aids deals with the radio, TV, et al., and will be foreign to many schools; while other visual aids present in all schools and communities are given slight emphasis. They make up for this in use of community resources. The materials on measurement, evaluation and reports to parents deserve much pondering. If applied it would alleviate many misconceptions among patrons. Many schools can profit by more emphasis on continuous evaluation in attitudes and follow-up.

The much propagandized lack of fixed grouping of children into programs or "tracks," like the old three-track program, are mistreatments of human personalities which are possible of correction by application of data from their chapter twenty-three-"Adapting Teaching to the Individual." They have made it clear that many groupings are desirable and that fixed, permanent grouping is detrimental to some educational objectives. Groupings can always be remade if the administrator thinks they can, rather than "It causes too much trouble"! The suggestions for teaching the gifted and the slow come from recent high-quality literature. In the treatment of the counseling functions of the teacher the writers deal with a quite controversial topic. It is because most high school teachers have been educated by training and experience to assume that teaching their assigned classes is all they are supposed to do and when the counseling duties appear, they tend to object. Mirabile dictu! Help to teachers will come from the authors' treatment of handling homerooms, student organizations, and the special services that teachers render.

One plague of high schools, the terrific emphasis placed upon inter-school athletics, is quite avoided but treatment of physical education is included. Perhaps they considered this part of many high school programs as a rather "illegitimate" child.

The reviewer recognizes many excellent qualities in this revised edition. It is comprehensive, scholarly in substance, contains much recent material of value to teachers, and is balanced in treatment; with the end-of-chapter exercises and references, it can be used either by classes in teacher education institutions, or with teachers in service. The reviewer believes it would pay many superintend-

ents and principals to become acquainted with the contents. It might serve as a slight deterrent to those administrators who so easily agree with criticism and who seemingly lack adequate professional knowledge and stability. The reviewer commends the book to the profession and congratulates the authors on this new revised edition.

A. R. MEAD

Gainesville, Florida

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EXPERIMENTALIST ORIENTATION TOWARD EDUCATIONAL THEORY

WILLIAM F. BRUCE

University of Virginia

This statement arises out of responsibility for participation in a panel on "Experimentalism" at the annual conference of the South Atlantic Philosophy of Education Society.¹ The writer here attempts to outline the origins and outcomes of his experimentalist orientation toward the work of the teacher. The title is intended to suggest a somewhat un-philosophic, but not antiphilosophic, approach. Doubting the purity of this particular philosophy, "Experimentalist Orientation" seems more appropriate than "An Experimentalist's Philosophy of Education." Doubting also the philosophic purity of the statement, "Toward Educational Theory" leaves more room for sources other than those granted by some specialists to "Philosophy of Education." Of course, some critics might assert that an inclination to adulterate philosophy with theories closely related to other disciplines was just a peculiarity of a homespun philosophy.

In tracing the general source of "experimentalist orientation," it appears to develop out of a more or less intimate contact with scientific method. Some of us have had extensive training in scientific experimentation where the goal may have been economic production on the farm or in the factory with no philosophic questions raised. To a greater or less degree every member of the educational profession has been and continues to be exposed to the experimental method in one form or another. It is a question, however, whether or how these daily contacts with scientific experimentation affect the educational theory of those so exposed.

For instance, most of us grew up in a dualistic tradition that made it second-nature to separate scientific matters from philosophic concerns. Accordingly, the efficient production of crops or

¹ Meeting at the University of Virginia, October 12-13, 1958.

the profitable manufacture of TV sets, for example, seems quite distinct from "living the good life" on the farm or in the city. To the extent that "liberal education" is a concern of the "spirit," it can be pursued philosophically without reference to the vocational educator's attention to experiments aimed at profitable production. Furthermore, science maintains natural, earthly connections with such basic materials as soil and iron-ore, even when the former is heavily fertilized and the latter refined into steel. In contrast, philosophy seems, in the dualistic tradition, to be linked with mystical, heavenly, supernatural sources. As many of us know from experience, it is easier and more comfortable to continue to live in this two-sided tradition, even if we do have to wander back and forth between the facts revealed by scientific experimentation and the ideals revealed by speculative philosophy, than to construct a single new path toward a more unified theory of education.

Whatever progress we may have made toward escaping from this persisting "cleavage in our culture," numerous studies outside the philosophic field, as commonly defined, have contributed much. There may have been vocational education leaders, who saw life whole enough to fit the making of a living within the design of a "good life." There may have been clinical psychologists, who showed how "compartmentalizations" of body and mind, business and religion, science and philosophy, and a host of others arise amidst related defensive evasions without the awareness of the victim. There may have been students of learning theory, who reconciled blind conditioning and clear insight, emotion and intellect, in a more unified view of learning. And finally, there may have been modern philosophers, who made a more

² Frederick Burkhardt, Editor, The Cleavage in Our Culture, Essays in Honor of Max Otto

⁵ Kurt Koffka, The Growth of Mind, New York: Harcourt, Brace and Company, 1925; Wolfgang Kohler, Gestalt Psychology, New York: Liveright Publishing Corporation, 1929; Robert M. Ogden and Frank S. Freeman, Psychology and Education, New York: Harcourt, Brace and Company, 1932; Ernest Hilgard, Theories of Learning, Appleton-Century-Crofts, 1948, 1957.

^{&#}x27;John Dewey, Democracy and Education, New York: The Macmillan Company, 1916; Boyd H. Bode, Fundamentals of Education, New York: The Macmillan Company, 1921; Max C. Otto, Things and Ideals, New York: Henry Holt and Company, 1924; V. T. Thayer, Public Education and Its Critics, New York: The Macmillan Company, 1954.

direct, sometimes shocking, attack upon the dualistic tradition from its ancient origins to its current outcomes. Certainly, many of us are indebted to a broad range of contributors for aid in bridging the artificial gap between philosophy and science.

Thus the experimentalist orientation leads away from a compartmentalizing dualism toward an inclusive unity. In education, this integrative trend means that the method of experimental trial is not limited to the natural sciences, such as physics, chemistry, and biology, but can be applied consistently to those fields contributing still more directly to educational theory, such as psychology and sociology. In fact, any practical problem of school administration or policy can be approached experimentally. The non-dualist applies scientific method wherever it promises

to enrich theory.

In emphasizing as a basic trend in experimentalism the wide use of scientific method, we do not claim that experimentalism is the only philosophy pointing away from dualism, nor that other philosophies may not employ scientific method freely. "Absolute idealism," "classical realism," and other philosophies may have their own ways of avoiding the pitfalls of dualism and of keeping philosophy in touch with scientific method. Rather it is being suggested here that the crucial problem of dualism, especially in the form of separating science from philosophy, can scarcely be evaded by anyone who is attempting to build a sound theory of education. Nor can the educational theorist safely ignore the pertinent evidence against dualism available in such disciplines as biology and psychology, as well as in school practice and philos-

Another attitude that appears to be associated with "experiophy itself. mentalism" is renewed confidence in the improvability of mankind. During the Nineteenth Century much of the scientific evidence brought forth was turned against the Eighteenth Century confidence in "improvability," as evinced by American revolutionary thinkers, like Franklin, Rush, and Jefferson, and their counterparts, the French Encyclopedists. The doctrine of biological evolution, as set forth by Darwin, was misinterpreted as degrading man to a beast. The details of Mendelian heredity

Charles Darwin, Origin of Species, 1859. For a significant account of the circumstances surrounding the publication of this volume, see Julian Huxley, "Darwin Discovers Nature's Plan," Life, June 30, 1958, pp. 63 ff.

led many schoolmen to feel that "human nature" was so fixed by the hereditary materials that there was no hope of improving man's educability. In the psychological field William James interpreted habit as a form of behavior fixed almost irrevocably by repetition, and this view was reinforced a little later by the popular Thorndikean psychology.7 At least the first generation of Twentieth-Century teachers predominantly regarded the stimulus-response (S-R bond) learning as involving specific neurological connections established by repetition with "satisfaction." It was generally believed that this particular underlying brain mechanism had a hereditary origin similar to the one-to-one correspondence assumed at that time to exist between a biological gene and a human personality trait. Furthermore, Thorndike and Woodsworth⁸ seemed to be saying that learning was so specific that there was little hope of man acquiring any general ability to understand his environment and himself. These doctrines of specificity in the areas of biological heredity, physiological neurology, and functional learning seem to reduce human education to the processes and therefore the level characteristic of cats confined in puzzle boxes or rats dropped into bewildering mazes. In the school, these discouraging interpretations by leaders in educational psychology tended to support the ancient lesson-reciting process in spite of evidence presented by Thayer⁹ that it was high time for the recitation to pass away.

In the meantime, specialists in psychological measurement, led by Terman, 10 had improved their instruments to a point where they could record a high degree of consistency in the IQ of a dull, a medium, or a bright learner from the first grade to the twelfth

^e William James, *Principles of Psychology* (Two Volumes). New York: Henry Holt and Company, 1890.

⁷ Edward L. Thorndike, Animal Intelligence: An Experimental Study of the Associative Processes in Animals, Psychological Review Monograph Supplement, 2 (1898), No. 8; Edward L. Thorndike, The Psychology of Learning (Educational Psychology, Vol. II), New York: Teachers College, Columbia University, 1913.

⁸ Edward L. Thorndike and Robert S. Woodworth, "The Influence of Improvement in One Mental Function upon the Efficiency of Other Functions," *Psychological Review*, 8, (1901), pp. 247-261, 384-395, 553-564.

V. T. Thayer, The Passing of the Recitation. Boston: D. C. Heath and Company, 1928.

¹⁰ Lewis M. Terman, Measurement of Intelligence. Boston: Houghton Mifflin Company, 1916.

and on into the years of adulthood. The duty of the school administrator then appeared to be the measurement of intelligence of boys and girls in the first grade, the classification of these pupils into groups corresponding to their intelligence, and the implementation of the work of each teacher continuously at the level and rate appropriate to the learners so assigned. About the same time that the IQ measurers' doctrine of fixed intelligence was most influential, the notion of fixed personality was promulgated by the clinical psychologists, who were primarily concerned with emotional rather than intellectual problems. The influence of psychoanalysis, under the leadership of Sigmund Freud,11 fell on the schoolmen with heavy emphasis upon the dominating control of the "mothering one" in the establishment during infancy of a persisting personality type. So from two extremes of psychologymeasurement of intelligence and genetic study of the motivated, emotional "self"-came views of the child that made teachers feel that it was useless to strive for any substantial improvement in either the ability or temperament of their pupils. In the face of the accumulating, weighty evidence from biology and physiology, from the psychology of learning, from mental measurement statistics, and from depth psychology, all loudly claiming to be scientific, how could an experimentalist take anything but a pessimistic view of the future of a race so limited by heredity, habit, repetitive learning, fixed intelligence, and persisting anxiety induced in so many babies by their worried "mothering ones."12

Although some discouraged educators turned away from "experimentalism" toward "idealism" or other philosophies that promised to soften the impact of scientific facts or to give greater personal assurance than the changing world that expanding science offered, 13 many of the experimentally oriented students of education continued their quest for further evidence on a wide range of problems coming continuously from the persistent application of scientific method. They were rewarded with heartening

¹¹ Sigmund Freud, General Introduction to Psychoanalysis. New York: Boni and Liveright, 1920. See also: Lawrence E. Cole, Human Behavior. Yonkers, New York: World Book Company, 1953, Chapter 20, "The Phychoanalytic Theory of Development: The Oral and Anal Stages."

Harry Stack Sullivan, The Interpersonal Theory of Psychiatry. New York: W. W. Norton and Company, 1953, pp. 41 ff.

John Dewey, The Quest for Certainty. New York: Minton, Balch, & Co., 1929.

evidence from various disciplines, including biology, physiology, psychology, and sociology, as well as enlightening studies of de-

veloping children guided by teachers with new ideas.

From biologists, like Jennings, 14 they learned that heredity was a much more complex process than a one-to-one relation between gene and human trait. In a seminar on philosophy of education, Professor V. T. Thayer helped the writer 15 to see how this new biological explanation of heredity undercut the Thorndikean view of one-to-one relation of neural bonds in the brain to concepts "in the mind." Jennings' description of many genes interacting in the production of a single bodily feature, such as eye color, demonstrated that an untold number of complexly interacting hereditary mechanisms participating with environmental conditions were involved in the production of personality characteristics. This new biology of heredity was supported by related physiological studies of brain processes, as by Lashley, 16 which indicated that a large part of the brain cortex is involved in learning processes of even a first-grader.

Thus biology and physiology combined to liberate the concept of learning that had held the pupil to a repetitive, teacher-dominated, memorization, recitation schooling. Incidentally, the emphasis Professor Thayer placed upon current biological research in his 1925 Philosophy of Education Seminar no doubt contributed to opening his graduate students' eyes to many areas beyond technical philosophy in their pursuit of theoretical orientation. Contributing also to the present writer's sensitivity to the significance of genetic studies were general college courses in biology and physiological as well as vocational studies in the agricultural college of the comparative racing records of the offspring of mares before and after their own best records were made. The point is that any educator's orientation in theory may well be as broad as the

Dissertation, Ohio State University, 1926. See also by the same author: Principles of Democratic Education, New York: Prentice-Hall, 1939.

¹⁴ Herbert Spencer Jennings, The Biological Basis of Human Nature. New York: W. W. Norton and Company, 1930.

versity of Chicago Press, 1929. See also: William F. Bruce and Frank S. Freeman, Development and Learning, New York: Henry Holt and Company, 1942, Chapter XII.

curriculum he undergoes, so it is dangerous to eliminate a course from the teacher-education curriculum on the single consideration

of its apparent lack of philosophic connections.

Of course, philosophy itself contributed greatly to the recovery of nerve by educators, to the courage needed in attacking popular concepts like the view that "habit" is a fixed and narrow form of behavior. That is, if we can claim for philosophy that peculiar mixture of psychology, philosophy, and common sense, Human Nature and Conduct, written by John Dewey.17 While writing this treatise on morality, which Max Otto18 pointed out carried as deeply revolutionary impact for ethical thinking as did Darwin's Origin of Species for biological theory, Dewey almost incidentally called attention to the flexible, adjustive quality of habit as evinced in skills.10 In reconstructing the Jamesian view of habit and calling attention to the social processes by which man becomes human, Dewey and others opened the way toward a more hopeful view of the potentialities of boys and girls in school. This "habit" of Dewey's of mixing psychological and sociological contributions freely in his philosophic thought may be involved in the remark of Randall²⁰ about John Dewey, "who by his own devious paths arrives here, as elsewhere, at a position which makes supreme sense." Dewey's great influence upon education and philosophy derives in part from the "devious paths" which often go far beyond the field staked out by some technical philosophers. It may not be amiss for others, who are trying to make sense out of current conflicting trends in educational theory and school practice to follow up suggestions that appear in a wide variety of fields.

The writings of the 1920's and 30's, which followed the hopeful trend opened by Dewey's Human Nature and Conduct, met with strong resistance, however, from conservative educators whose insistance upon the constancy of the IQ was based not only upon

Company, 1922.

¹⁸ Max C. Otto, The University Summer Session Lecture, Ohio State

²⁰ John Herman Randall, Jr., Nature and Historical Experience. New York: Columbia University Press, 1958, pp. 30 f.

¹⁷ John Dewey, Human Nature and Conduct. New York: Henry Holt and

University, 1925.

See in William F. Bruce, Principles of Democratic Education, Chapters on "habit," based upon the author's Master's Thesis, Ohio State University, 1924.

the consistency found but upon a more or less hidden assumption that the hereditary origin of intelligence was the principal causal factor. This persisting insistance on the dominating force of heredity begins to look today like another instance of what Galbraith21 calls, in the field of economics, "the conventional wisdom," its chief criterion being widespread "acceptability." In the field of educational psychology, the challenge to "the conventional wisdom" about the nature of intelligence reached a peak of great intensity with the presentation at St. Louis in 1940 of the NSSE Thirty-Ninth Yearbook,22 which turned out to be a debate between John Anderson,23 taking the side of "nature" or heredity, and George Stoddard,24 emphasizing the contributions of "nurture" or environment. Whatever view is taken of the naturenurture controversy in which the educational psychologists25 have so vigorously engaged, it is evident that one's theory of education is affected thereby. It may be also that the sensitivity of an educational psychologist to the data supporting the "nature" or the "nurture" contribution, as well as the kind of experiments he chooses to design, is affected, often without his full awareness, by a philosophic bias. Indeed, the devotion of some educational psychologists to science in preference to philosophy is itself a kind of unconscious, negative, compartmentalized philosophy, which limits his view. So it may be that a substitution of "theory" for "philosophy" in the title of a publication or name of an organization might induce attention from an educational psychologist, re-

²¹ John Kenneth Galbraith, The Affluent Society. Boston: Houghton Mifflin Company, 1958, Chapter II.

National Society for the Study of Education, Thirty-Ninth Yearbook, Intelligence: The Nature and Nurture. (George D. Stoddard, Chairman). Part I: Comparative and Critical Exposition, including a chapter by John E. Anderson, "The Prediction of Terminal Intelligence from Infant and Preschool Tests." Part II: Original Studies and Experiments. Bloomington, Illinois: Public School Publishing Company, 1940.

²³ John E. Anderson, The Psychology of Development and Personal Adjustment. New York: Henry Holt and Company, 1949.

²⁴ George D. Stoddard, The Meaning of Intelligence. New York: The Macmillan Company, 1943.

²⁵ For recent summaries see: G. M. Blair, R. S. Jones and R. H. Simpson, Educational Psychology, New York: The Macmillan Company, 1954, pp. 32-37; Lawrence E. Cole and William F. Bruce, Educational Psychology, Second Edition, Yonkers, New York: World Book Company, 1958, Chapter 4.

sulting in his becoming more "philosophic" in his approach to the work of the teacher.26

The theorist in education, whether his orientation is toward "absolute idealism," "classical realism," "experimentalism," or some other philosophy, cannot afford to ignore the developments in clinical psychology any more than the changes occurring in the psychologies of learning and intelligence. Although Freud's emphasis upon the dominating influence of the infancy period has undergone much fruitful reinterpretation, the pertinence of psychiatric studies to one's overview of the possibilities inherent in school education have not diminished. Writings in psychiatric theory, such as Sullivan's The Interpersonal Theory of Psychiatry, will no doubt continue to contribute to the philosophy of those educators who maintain contact therewith. Among the other promising fields of study that lie so close to the teacher's task that their findings are likely to contribute substantially to educational theory, there remains space to mention only two: group dynamics and sociology.

Although the enthusiasm of "group-dynamics" specialists, based upon their considerable achievements in the personal guidance of individuals through participation in small groups under able leadership, may take them too far in making generalizations; the contribution of this new discipline is worthy of attention by all educators-administrators, teachers, and teacher-educators. The contributions of group dynamics are reaching far beyond methodology27 and administrative insight28 toward fundamental the-

²⁰ William F. Bruce, "Personal Development During Childhood and Adolescence," Chapter 13 in Charles E. Skinner, Editor, Educational Psychology, 4th Edition. Englewood Cliffs, New Jersey: Prentice-Hall (in press).

²⁷ Kenneth D. Benne and Paul Sheats, "Functional Rôles of Group Members," Journal of Social Issues, Spring, 1948, Vol. 4, pp. 41-49; David H. Jenkins and Ronald Lippitt, Interpersonal Perceptions of Teachers, Students, and Parents, Washington, D. C.: Adult Education Service, National Education Association, 1951; Gale E. Jensen, "The Social Structure of the Classroom Group: An Observational Framework," The Journal of Educational Psychology, 1955, Vol. 46, No. 6, pp. 362-374; Herbert A. Thelen, "Group Dynamics in Instruction: Principle of Least Group Size," The School Review, March, 1949, Vol. 57, pp. 139-148.

²⁸ Gale E. Jensen, "School as A Social System," Educational Research Bulletin, 1954, Vol. 33, pp. 38-46; Gale E. Jensen and Max R. Goodson, The Formal Organization of School Systems, Minneapolis: Burgess Publishing Company, 1956.

ory.²⁹ The fact that administrators of mammoth business organizations and governmental agencies have been paying more attention to the theory and practice of group dynamics than school administrators does not prove that he who would view education philosophically can afford to turn his back upon the theory of group dynamics.

Turning to the possibility of theoretical contributions from sociology this discipline has not been noted in the past for its attention to theory. Indeed, it has appeared to many educators as paying so much attention to the fact-gathering processes that general principles and ethical implications of a philosophic character were crowded out of consideration. There are now, however, some signs of a change in direction. For example, Angell30 has recently made a penetrating venture into sociological theory. His volume contains, in addition to many practical suggestions for teachers and school administrators, observations about the functioning of the "moral web" between society's "shared values," with which philosophers are concerned, and the "societal structure." These scientifically based observations have their theoretical implications for education, which Angell in some places draws out and in others leaves for the educator to discover for himself. So in the uncultivated, interdisciplinary terrain between sociology and educational philosophy, there may lie undiscovered many a potential contribution to educational theory for the widely ranging student to uncover. Incidentally, some of the most stimulating contributions heard by the writer at the annual conferences of the national organization, with which we are affiliated. The Philosophy of Education Society, have come from speakers, who were drawn in from other disciplines than technically "pure" philosophy.

Robert R. Blake and Jane S. Mounton, Theory and Practice in Human Relations Training, The Hogg Foundation for Mental Hygiene, 1955; Herbert A. Thelen, "Group Dynamics in Curriculum Improvement," Educational Leadership, 1954, Vol. XI, No. 7, pp. 413-417; Kurt Lewin, Field Theory in Social Science, New York: Harper and Brothers, 1951; Herbert A. Thelen, The Dynamics of Groups at Work, Chicago: University of Chicago Press, 1954; Herbert A. Thelen, (Issue Author), "Educational Dynamics: Theory and Research," The Journal of Social Issues, 1950, Vol. VI, No. 2.

⁸⁰ Robert Cooley Angell, Free Society and Moral Crisis. Ann Arbor: The University of Michigan Press, 1958. See review by W. F. Bruce in Ethical Outlook, January-February, 1959.

The wide range from which education's leaders are today gleaning their theories is exemplified by the inclusion of political concepts, industrial psychology, and group dynamics by Ladd³¹ of Yale; of social sciences by McMurray³² of Illinois; of literature and history by Kircher³³ of Ohio State; of widened cultural perspective by Brameld³⁴ of Boston; of inclusive social-moral considerations by Stanley³⁵ of Illinois; and by Smith³⁶ of Tennessee of "as broad a base as possible" in building a discipline that is not necessarily a logical "derivative of some particular philosophy." The specialist in philosophy of education, if he is to keep up with the administrative leaders of our school systems, can well afford to include a similarly wide range of sources in the continuous revision of his philosophy or theory.

In indicating here that an "experimentalist orientation" encourages consideration of many sources of theory, there is no intention to claim that other philosophies may not likewise be widely oriented. "Absolute idealism," "classical realism," "empirical naturalism," and other systematic theories may likewise work into their philosophies suggestions from the fields of graphic and plastic arts, mathematics, physics, chemistry, biology, physiology, political theory, economics, sociology, group dynamics, and psychology with its industrial, clinical, and educational subdivisions. To the extent that the philosopher is alert to the likelihood of discovering theoretical implications over the entire scope of human experience, he may be able to make all these ideas integral

The Problem of Keeping Order: Theoretical Help from Two New Fields,"

"The Problem of Keeping Order: Theoretical Help from Two New Fields,"

"The Problem of Keeping Order: Theoretical Help from Two New Fields,"

"Harvard Educational Review, XXVIII, 1 and 2, pp. 19-28, 136-149.

Educational Review, AAVIII, I also provided in Education, "Preface to an Autonomous Discipline of Education," Educational Theory, V, 3, pp. 129-140.

Everett J. Kircher, "Philosophy of Education—Directive Doctrine or

Liberal Discipline?" Educational Theory, V, 4, pp. 220-229.

Theodore Brameld, "Philosophy of Culture: Implications for Philosophy of Education," Educational Theory, VI, 3, pp. 157-169. Also Cultural

Foundations of Education, Harper, 1957.

Stalley, "Freedom and Education in a Corporate Society,"

Educational Theory, VII, 1, pp. 1-11. Also Education and Social Integration, Bureau of Publications, Teachers College, Columbia University, 1953.

²⁰ Philip G. Smith, "Philosophy, Educational Theory, and Pedagogy, "Educational Theory, VI, 3, pp. 129-134. Also: "Education as a Discipline," a paper presented to the South Atlantic Philosophy of Education Society, meeting at American University, Washington, D. C., October, 1956.

aspects of his comprehensive view. He may even be able to find each idea in germinal form within his own widening orientation. If Randall³⁷ finds so much of his modern "empirical naturalism" in Aristotle, it may be because John Dewey and others—in philosophy and out—have helped him to read Aristotle with Twentieth-Century sensitivity. Of course, some critics might say that the search for all sound ideas within one's particular philosophy is a rationalizing rather than a reasoning process. In any case, an educator's theoretical base may be strengthened by persisting attempts to reconcile theories coming from many points of the intellectual compass. Certainly, much enrichment of human thought involves the incorporation of wisdom from all the ages in the

attack upon the crucial problems of today.

Nor is there any intention here to so overemphasize scientific and other sources as to push philosophy out of theory. We do not mean to minimize the contributions of philosophy to educational theory, any more than Randall38 "has any immediate intention of starting such a purge" of departments and professors of philosophy, when he writes, "I believe that there is equally no rational reason for any separate and independent 'Departments of Philosophy' in academic teaching". Every department should include members with philosophic imagination and horizons, and capable of philosophic analysis." Although it sometimes seems that an organization named, "The Society for the Study of Educational Theory," might contribute much to educational progress in this period, no such proposal is appropriate unless our mother organization, "The Philosophy of Education Society," follows its own precedent in naming its official organ, Educational Theory. Although this "theory" name was adopted as a "natural" by the founders of our journal,30 it does not appear that "philosophy" is slighted in this professional organ. Likewise, the continuation of the "South Atlantic Philosophy of Education Society" under its old banner need not prejudice the introduction of many contributions from other sources than the philosophic orientations of its members.

Before concluding, may we appeal to all for help on a problem

²⁷ John Herman Randall, Jr., op. cit., pp. 10 ff.

²⁸ Ibid., p. 27.
²⁹ Correspondence from the Editor, Archibald W. Anderson, to W. F. Bruce.

that has troubled some of us who acknowledge an "experimentalist" orientation. These are the questions: How are "experimentalism" and "democracy" related? Is orientation toward the wide application of the experimental method identical with orientation toward democracy as a personal and social goal? Or, is democracy a social means through which we move toward an unending experimental end? As Thayer40 points out in an address full of "supreme sense," science has contributed to the democratic way of life both as a logic and an ethics, (1) by welcoming new ideas that confront and gradually replace the old; (2) by using as its criterion "not origin, or authority, or conformity with tradition," but the consequences or implications revealed by unbiased investigation; and (3) by its way of resolving differences, "not through the suppression of the weak by the strong ... but through the method of discussion" taking "the fullest possible account of all the factors operating within the situation." Earlier in this address, Thayer presents three characteristics of democracy, which it is fruitful to compare with the contributions of science. These are: "respect for the integrity of personality, the ideal of mutually creative relations between individuals and groups, the peaceful resolution of conflicts and differences."41 While the last members of both groups appear practically identical, the first two of the latter group have personal qualities that we associate more readily with "democracy" than with "science," or in our terms, "experimentalism." The question comes to this: Is an "experimentalist orientation" a basis broad enough for an adequate educational theory, or do we demand something more, namely, "democracy," to give humane, ethical direction to experimentation with our children in the schools? Since we adhere to "the democratic way of life" as a goal, insisting on its open-ended, experimental character, the corresponding theory of education may well be entitled, "a democratically-experimentally oriented theory of education," even though the "absolute idealist," the "classical realist," and the "empirical naturalist" all may claim that such expansiveness is an invasion of their own preserves. Does falling at last for "democracy," as an end, philosophically undercut our emphasis upon

V. T. Thayer, "Today's Challenge to Education," Address delivered at School Week, June 10, 1958, School of Education, University of North Carolina, Chapel Hill, pp. 9f. " Ibid., p. 7.

"theory" as the broad base for thinking about the work of the teacher?

In conclusion, one suggestion may be made concerning the program of the South Atlantic Philosophy of Education Society. Why not reverse our 1958 approach, in which we draw lines between several philosophic orientations, by taking in 1959 a current issue in education and encouraging the membership to make contributions to its solution from their diverse orientations? Would it be democratic to experimentally invite a contributor from outside philosophy?

THE EDUCATION OF THE MENTALLY RE-TARDED IN THE LIGHT OF THE NEW EMPHASIS ON EDUCATION OF THE GIFTED

L. X. MAGNIFICO

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For years many educators have been attempting to induce the public to accept the concept that a system of specialized education is needed in our schools, for only by such means can we deal sufficiently with the individual differences that exist among students. However, all these attempts have met with extremely limited success. Then, recent world events caused the public to become suddenly aware that our prevailing system of education was something less than perfect. As a result of their unexpected humbling, the people of the United States have grudgingly admitted that special education for the gifted is, if not desirable, at least necessary. But they stop there; they fail to recognize that, in the light of the same events, education for the mentally retarded is just as necessary as for the gifted.

The reason that the public fails to see further than our obvious need for trained scientists, engineers, technicians is that its willingness to overhaul our educational system springs more from wounded vanity and fear than from any real insight into the problem that faces us. What the public is asking is not how have we failed our children, but how can it be that we, the richest, most advanced nation in the world have been outstripped technologically by another country—even if only for the moment? How is it that Russia which, not so many years ago, was a poor, undeveloped country has apparently been able to match and, in some areas, exceed our scientific attainments? Obviously something must be wrong with our schools that such a thing should have come to pass,

squarely upon the educators; it is they who are responsible for our crushing loss of face.

Undoubtedly there is much that is wrong with our educational system, but the responsibility for its weakness lies at the door of

and the fault for this inadequacy, the public maintains, falls

the public rather than of the educators. The educators serve the people; their job is merely to give the taxpayers what they profess to want—and that is what educators have, in the main, been trying to do. If what the taxpayers thought they wanted turned out to be the wrong thing, surely it is unjust to blame those who acted only

as agents to carry out their orders.

But the public has been unjust. Now it cries out that educators should have modeled their curricula upon the European system—which, the latest cliché has it, is far superior to the American. Qualitatively, the European does undeniably have many advantages over the American system of education. Since in most European countries only the intellectually élite (and, perhaps, the very rich) are educated beyond the elementary grades, it is obvious that the work offered can be of a far higher calibre than studies geared to the needs of groups which run the gamut of intelligence. In this country, a far larger proportion of young people receive a high-school education in comparison to those in other countries, because mass education is what the people have always demanded as an integral part of our democratic system—and quite properly so, even if their motives have not always been as lofty as they appear to be.

The truth of the matter is that we do not provide education for such a great number of our young people simply out of sheer democratic idealism. Our society is intensely urbanized and mechanized, which means that fewer and fewer people are producing for more and more. As a result, children's services are no longer needed on the farms and in the factories. When the children began to compete with their elders on the labor market, the need arose to keep them wholesomely occupied in some way. Schools seemed to provide an excellent solution for this problem, so the children were herded into these institutions and educated en masse. It must be remembered that the child labor laws were established when the need for child labor began to wane, and that we began to provide mass education for the children when it became necessary to find a convenient and yet idealistic method of keeping them out of the way. That was not, of course, the only reason, yet it was a cogent enough factor to make the public's protests in the name of democracy hold a hypocritical tinge.

In any case, one reason that we educate the masses rather than the élite alone is that we can afford to do so, in terms of manpower as well as money. The difference between the European and American educational systems, therefore, did not come about as a planned result of differing political and economic systems; by and large it was a fortuitous result of circumstances. Since only a minimal number of students could be given a more advanced education, the Europeans naturally chose their best minds to fill the classrooms. As we are faced with no such choice, we educate all, or nearly all, of our young people.

As a result, the quality of our education has suffered. However, this is not a necessary result of mass education. It is perfectly feasible for an educational system to achieve the qualitative heights of the best European standards while retaining its quantitative superiority. The solution is simple: since no one system of education can be applied to every student, adjustments must be made

to compensate for individual differences.

It is those adjustments that, in the name of the democratic ideal, our public has stubbornly refused to accept. We are all born equal, it says; therefore, every child must be given precisely the same education as every other child. That is the premise which has done more than anything else to vitiate the effectiveness of our schools.

For the premise is a false one: we are not all born equal. We are not all born tall; we are not all born handsome; we are not all born intelligent. An individual with an I.Q. of 80 is as unable to equal the learning capacity of one with an I.Q. of 140 as an ugly person is unable to become beautiful. In other areas of school activity, individual differences are accepted as a matter of course. No one has suggested that every child has the same right to play on the football team or sing in the school choir. Why are physical genetic differences recognized and mental genetic differences dismissed?

Yet even some enlightened men seem to feel that everyone is born with equal cortical ability, and, hence, has the same capacity to absorb education. Even though, after investigating the matter, the United States Chamber of Commerce brought out a publication and film "Education, an Investment in the People," which endorsed the doctrine of individual differences among students and the consequent necessity of individualized education, the publicand some of its presumably more sophisticated leaders—still refuses to accept these proven facts. They continue to adhere to the concept that the classroom must be a miniature reproduction of the cosmos; even if there are mental differences among children, they

will not be segregated in the outside world, so why should they be separated in school? The idea that specialized education within the framework of the school will help the retarded individual to become an acceptable member of the larger social group later seems far-fetched to them.

And yet, giving every child exactly the same education in the same class with all others of his age group (and, if it is undemocratic to classify him according to his intellect, why is it not equally undemocratic to classify him according to his age?) is, in fact, a complete perversion of the democratic principle. If all children are put in the same classes in order to function at all, the classes will have to be geared to the level of the average or dull normal, so that as many children as possible will absorb as much as possible. In such a milieu, the exceptional child is lost; the superior mentalities as well as the inferior ones are prevented from achieving their fullest development. Hence, they are not given opportunities equal to those the average child enjoys: they are deprived of the privilege accorded to him, that of learning as much as he can. This is far from democratic. The only kind of equality that democracy can give is equality of opportunity. Each student can be given the chance to learn as much as he can, but, under our current educational system, very few students are.

Because the world's sudden eruption into the space age has found us educationally unprepared, the public is now willing to concede the usefulness of special classes for the gifted. Such classes would be, it seems, a good investment after all. However, although the public thereby implicitly accepts the concept of individual differences, it still refuses to concede that special training is fully as of learning as much as the average, too many people say, perhaps we should not bother to teach them at all. Why should the schools act as baby sitters? That's street the street and st

Let us forget about the democracy too far, too expensively. Let us forget about the democratic aspects of the question for the moment and consider the problem in "dollars and cents" terms. It actually pays to educate the mentally retarded. Behind every nuclear physicist, behind every satellite engineer, there exists an army of workers for whom training rather than intelligence is the important requirement. In our haste to develop without which the genius is useless—unable to function.

For every individual in this country who has a superior mentality—that is, who has an I.Q. over 130—there are over five slow learners and retarded individuals—with I.Q.'s of 50 to 90. If the basic democratic criterion that the majority rules is to be applied literally here, then it is the gifted who should be told to leave school, and the mentally deficient the ones who should remain to receive the full benefits of education. However, there is no point in reducing the argument to an absurdity; of course the forty-two

million retarded need the eight million gifted.

The point is, the eight million gifted need the forty-two million retarded. It is granted that the gifted need special education to become, as we hope, our leaders—our creative artists, scientists, teachers, clergymen, and so on. However, the number of occupations for which a high degree of intelligence is not required for success is far greater than the number for which it is necessary. Provided that he has been well-trained and is well-adjusted to his limitations, the individual in the 50 to 90 range can comfortably fill positions as skilled laborer, barber, waitress, bricklayer, seamstress, servant, etc. Of course many individuals now working in those professions are of far higher intelligence; it is not that such persons do not have intelligence above 90, but that they do not need it to achieve competence in their work. And these people are just as integral a part of the community as the scientists and teachers. It is for them, the masses, that the gifted are to be trained as leaders, and an enlightened leader's effectiveness is cut in half if he does not have equally well-enlightened followers. In this sophisticated and specialized era, a man must be trained to follow as well as lead; education is needed in order for the individual to be able to cope with every aspect of life.

That our educational system needs to be drastically changed is a premise with which few would quarrel. We are faced with two ways of effecting such a change. We can follow the suddenly muchadmired European system and terminate education for the masses at the end of the sixth grade, leaving only the educationally élite to pursue their studies. In such a way, we can save millions of dollars; we will no longer be faced with a shortage of competent teachers (in fact, we will be able to get rid of at least a million of those currently in the field) or a shortage of adequate physical plants. Our masses will be relegated to the status of animals, but

taxes will go down.

There is another course we might also pursue—but one that would cost us millions, perhaps billions, of dollars more (dollars which, could the public only be brought to realize it, would come back a thousandfold in the long run). We can slough off the pseudo-democratic fantasy that each child is born equal and should receive the identical education in favor of the truly democratic concept that each child is not born equal, but has the greatest chance of achieving equality with his peers—in terms of success in his own field and personal satisfaction—if he is given an education commensurate with his individual needs and abilities. Every one of us has a contribution to make; let us give him his chance to make it.

TEACHING AS A VOCATIONAL CHOICE

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Can the current group of high school seniors provide an adequate supply of teachers? What do high school seniors think of teaching as a possible vocational choice? An attempt was made to get a partial answer to this in a questionnaire survey of ten senior high schools in the Chicago metropolitan area in 1955.

A random sample of the metropolitan area rather than the city proper was made because a stratified sample of urban and rural students would be more meaningful. The majority of the schools were township high schools. The 535 high school seniors who responded to the questionnaire were chosen randomly in each school.

The students' responses as to interest in the teaching profession

are presented in Table I.

If one considers all the career opportunities available to these students the percentage of students currently interested in teaching is high. More girls than boys are interested in teaching. In addition, more girls than boys have changed their minds about

teaching as a career.

The most frequently mentioned reasons for not considering teaching as a career appeared in the following order: (1) other career interests; (2) low salary; (3) lack of appeal; (4) lack of ability; (5) uninteresting work. The most frequently mentioned reasons for considering teaching as a career appeared in the following order: (1) like to work with children; (2) think teaching enjoyable work; (3) would like to teach a particular grade or sub-

ject; (4) like to help others; (5) need for teachers.

Since the seniors are in the process of making vocational choices, the question arises, What help have they received in selecting teaching as a profession? Sixty-two per cent of the total group of students reported that no one had encouraged them to consider teaching as an occupation. Eighty-five per cent of those who had changed their minds or were definitely not interested in teaching reported no advising on the matter. Teachers and parents were reported as the most frequent source of encouragement. Seventy-six per cent of the total group reported that no one discouraged

TABLE I.—STUDENT INTEREST IN TEACHING

	Male		Female		Total	%
	Number	% of 535	Number	% of 535		
Currently interested	16	3	68	13	84	16
Undecided	16	3	31	6	47	9
Currently not interested but may consider it	23	4	18	3	41	7
Once interested but changed their minds	52	10	106	20	158	30
Definitely not interested	137	26	68	13	205	39
Total	244	46	291	55	535	

them from teaching but teachers and parents were reported as the most frequent source of discouragement. From these figures one can imply that the majority of students have not been advised one way or the other in choosing teaching as a vocation.

Since the seniors in this study have been in school for approximately twelve years, what effect did the attitude and treatment of their teachers have on their choice of teaching as a vocation? A partial answer to the question is found in Table II.

Seventy-six per cent of the total group said that their teachers'

TABLE II.—RESPONSES TO THE QUESTION "HAS THE ATTITUDE OR TREAT-MENT OF TEACHERS DISCOURAGED YOU FROM TEACHING?"

	Yes	% of 535	No	% of 535	Total	%
Currently interested	11	2	73	14	84	16
Undecided	8	1	39	7	47	8
Currently not interested but may consider it	12	2	29	5	41	7
Once interested but changed their minds	39	7	119	22	158	29
Definitely not	58	11	147	28	205	39
Total	128	23	407	76	535	

attitude or treatment had no effect on choosing teaching as a vocation. It is interesting to note that the percentage of yes responses increases as the distance from teaching as an occupational choice increases.

Although sixteen per cent of the total number of students are interested in teaching, the actual number of students who will enter and successfully complete their training will be much lower. This means that the potential number of entrants to the field must be increased

What are some of the possible changes in teaching that would induce high school students to select teaching as a vocation? The ten changes suggested by the seniors that would make teaching a more attractive vocational choice appeared in the following order: (1) better pay; (2) less extra work; (3) better facilities; (4) smaller classes; (5) more independence for teachers; (6) better pupil-teacher relations; (7) better parent-teacher relations; (8) opportunity for advancement; (9) more respect from pupils; (10) professionalizing teaching. The suggested changes show a mature viewpoint and reflect current thinking on the matter.

Although many students stated that they received no encouragement to enter the teaching field, one out of six reported being currently interested in teaching as a career. Since the attrition rate between the time of high school graduation and completion of teacher training is high, a planned program of recruitment may be needed to persuade more high school students to consider teaching as a career. Certain changes in teacher working conditions might also be helpful in attracting more high school students into the profession. In addition each teacher should examine her attitudes and methods to see if they serve to discourage students from choosing teaching as a career.

A SAGA OF THE "SPECIALIST" MISCONCEPTION

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"Specialist" is a term which has certain aggrandized implications with respect to training and preparation, and denotes a person who possesses unusual competency in any particular branch of activity within his profession. Overemphasis of this concept has often carried the service the specialist can render beyond the reach of the small school—the American educational unit that may need it the most.

In this age of specialization and technology the trend is toward having almost every aspect of education represented by specifically designated and accredited specialists. Certification for a specialty is obtained through the completion of a predetermined number of college courses and the acquisition of an experiential background.

There is no argument against the desirability of acquiring higher levels of competency in a chosen area. However, when this concept is overstressed the conclusion may be drawn that neither staff nor students will receive the benefits of the special service unless a bona fide specialist is available. The small school system with a limited staff, budget, and facilities cannot hope to provide all the

necessary specialized services.

The "halo" aspect of the specialist has developed because the small schools have been prone to ape larger systems in more urban localities. The small schools, however, need not despair if they are unable to secure staff members with the specialist certification, nor is it necessary for them to forego entirely the benefits provided only through the services of specialists. Rather, they should explore the merits of an in-service program and an "action experience" type of project through which the classroom teachers can acquire special skills to such a degree that the school can provide a measure of specialization.

These questions now arise, "What is an action experience project?" and, "How can the small school, working with a small staff and a limited budget, mobilize its resources to provide the best possible service to its faculty, students, and community?" In a

search for answers to these questions let us see how the school at Donnybrook Meadows, a hypothetical case, provided through an in-service program such a project which might be an example to

be followed by similar small schools.

The public school at Donnybrook Meadows, a small town quite some distance from any urban center, has a population of 120 students, a staff of five teachers, and a superintendent who also performs the duties of a principal. A year ago the superintendentprincipal, Mr. Fudge, called his staff together to go over the plans for the coming year. For some time both he and his staff had been concerned because certain needed services had never been provided by the school. Regardless of size, all schools have service needs such as guidance, curriculum reorganization, teaching aids, library facilities, and instructional improvement. The staff at Donnybrook, however, had never attempted to provide these services; they had been too busy teaching the subject matter of the "college prep" oriented curriculum.

Mr. Fudge had received approval of the budget for the coming year and, as usual, no provisions were made for additional staff or for special services. He decided to present the problem to his faculty and ask for their suggestions and help. After some study, the faculty responded with a carefully planned program designed to utilize available resources.

The first step was to determine what the needs were and to rank them according to immediacy. The staff was then polled to determine who would be interested in taking responsibility for pro-

viding the needed service.

Miss Jones, the English instructor, indicated an interest in guidance. During her short tenure at Donnybrook she has been Quite successful in developing rapport with both students and fellow teachers. It has also been noteworthy that parents have sought her out at parent-teacher gatherings. Mr. Johnson, the social studies teacher, believed that he could suggest a reorganization of the instructional program. He has been a member of the staff for five years and had considerable teaching experience prior to taking the position at Donnybrook Meadows. Almost since his first appearance on the faculty he has been sought out by those of his colleagues who have problems pertaining to their teaching. The remainder of the staff pledged their support and active cooperation toward providing better educational services to the children of the

school. In addition, it was decided that through regular communication with lay leaders in the community the public would be kept aware of the program and of the improved learning conditions that would result from it.

Miss Jones had read much in professional literature about guidance, and some of her original ideas had been of great help to students, faculty, and parents in the past. Her plan for a guidance program consisted of three parts. First, a small library of occupational information was developed to aid in her work with parents in developing their children's future occupational and professional plans. This type of information was also used in classwork for better coverage and a sounder basis for emphasis. Second, she began a sequential testing program which provided objective data on the intelligence level and educational progress of each student from grades three through twelve. Group tests were administered in each class so that responsibility and effort were shared, and diagnostic tests were used when the need was discovered. Third, guides were set up to assist other teachers on the staff as well as herself when conferring with parents and individual students. She recognized that the parent-teacher conference is the most desirable way to communicate with parents and to interpret each phase of the school program for them.

Mr. Johnson followed a four-point program as his part of the project. First, he developed a more functional library. He believes that a library should not consist of books per se, but of "working" books whose use contributes to the development of the reader. "The library," he said, "should not be a depository for east-off books, but should be a reading laboratory which contains a wide variety of source materials which can be drawn upon for use in all courses. It should be a place where students can discover the value of printed matter as a study tool. It should be organized and equipped so that both teachers and students can utilize it for project development. In fact, the library should be recognized as the center of abundant, up-to-date, practicable information." He also feels the library should include professional books and periodicals through which teachers can discover ideas for course enrichment and suggestions that will help them solve their daily classroom problems. Second, he sent for and cataloged free and inexpensive teaching aid materials. Many teachers do not know that

a wealth of material is made available by numerous companies and agencies throughout the country at little or no cost. Teachers do not have time to spend in a trial-and-error search for these aids. so Mr. Johnson screened, sorted, and cataloged the material to put it in the best form for utilization. Third, with the coöperation of other staff members he developed a resource unit in his own field of social studies as a pilot study to indicate the usefulness of the curriculum development technique. He also demonstrated how the resources of many textbooks and courses of study could contribute motivational ideas to be incorporated in a classroom teaching unit. It was evident that the resource unit could establish goals or objectives, stimulate activities that motivate and challenge thinking, and provide films and filmstrips helpful in presenting particular areas of a course as well as bibliographies for use by students and teachers. Fourth, he requested the teachers to develop a particular specialty such as unit teaching, panel presentation by students, or the use of audio-visual aids in the classroom. As each teacher became familiar with this specialty in his or her classroom a number of interclass visitations were scheduled, and all teachers gained from each other's research.

At the end of the year it was evident that a great improvement had taken place in the school. Miss Jones and Mr. Johnson had profited by a year of experience in dealing with the problems which logically arise from such a venture. Miss Jones was moved to further action by the expressions of appreciation from students who had been helped in many ways by a faculty that was fast becoming "guidance minded" as the full potential of the service was discovered. Mr. Johnson took pride in the realization that the other teachers were not only being assisted with difficult problems, but that the quality of training now available to the students had been greatly improved. Both Mr. Johnson and Miss Jones came to recognize their limitations, and realized that if they were to continue to produce results they would have to develop their backgrounds through professional reading and by more thorough

training through course work in a college or university.

An extremely important development during this year was the improvement in community-school relationships. Through regular communication with lay leaders the public was kept informed of the program and of the improved learning conditions in their school,

and the staff was made aware of the sincere appreciation of the community. The faculty felt their efforts were recognized, and

enthusiasm and motivation remained high.

Realists in the profession will almost immediately brand this a figment of the imagination. Probably the most obvious criticism will be that in a school the size of Donnybrook time could not be found to carry out the job in the successful manner of the hypothetical case. The charge of oversimplification will most certainly be leveled. The following implications may, however, be gleaned from "A Saga of the 'Specialist' Misconception":

(1) The Donnybrook Meadows School would have continued to have an emaciated and undernourished educational program unless

measures such as those indicated were taken to improve it.

(2) The cooperative plan suggested is not impossible; on the contrary, it is logical and reasonable. Enthusiastic and dedicated teachers could assume this type of action experience even with a heavy teaching load, because the theory of cooperation and dispersal of responsibility is introduced so that the burden would not

be too great for any member of the faculty team.

(3) Not only were both pupils and teachers given help which could not be provided otherwise, but two members of the staff were given the opportunity to upgrade themselves along lines of their interests through reading, professional training, and on-the-job experience. Under traditional circumstances a school of this size does not generally provide such opportunity for growth in professional stature.

(4) Awareness of the fact that the teaching staff of the school improved professional offerings through its own efforts earned the respect and admiration of the lay public. Such rapport between school staff and school patrons could be the starting point for recognizing the rôle the community plays on the educational team charged with the responsibility of educating the community's chil-

dren.

THE SUPERINTENDENT MUST LEAD IN CURRICULUM DEVELOPMENT

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Curriculum definitions have been expressed in a variety of ways but for many centuries the term "curriculum" has been used to mean a listing of subjects or courses. This is still the meaning given in most dictionaries. However, many authorities in the field of education agree that the "curriculum" consists of all the experiences which children have under the direction of the school. Curriculum development under this conception involves planning the experiences to be used; organizing them into a program; implementing this program; and evaluating the curriculum thus developed.

Superintendents represent both lay and professional groups. Superintendents represent both the professional and policy-making groups involved in public education. It is incumbent on the chief administrator of a school system to make curriculum study one of his major concerns. Although the superintendent should not avoid the responsibility for being well informed and for having definite, professional convictions and a consistent philosophy concerning the school program, he should remember that curriculum planning involves the participation of many persons and groups. The effectiveness of the process determines to a large extent the degree to which the program can be deliberated and improved.

Avoid over-use of authority. It is recognized that the superintendent of schools is the executive officer of the school district and that he is directly responsible to the people through their representatives on the board of education. He has both authority and responsibility for development of the school program. It does not follow, however, that authority need be "authoritarian." The way in which this authority is used will have a definite effect on curriculum planning. Use of authority in a rigid, formal, and inflexible manner will stifle creative energies of the school faculty. Likewise, an attitude of indifference or neutrality will give the faculty the idea that their efforts are being wasted. Many of the decisions concerning curriculum should be made by the persons closest to

the situations—the classroom teachers or groups of teachers charged with the responsibility for defined phases of the program.

Establish the machinery. A wholesome trend in recent years is the growing tendency to think of curriculum revision as a continuous process of evaluation and adaptation. The modern curriculum is made or revised through the coöperation of the superintendent, the supervisors, the principals, the teachers, and all other educational employees. Frequently persons from professions other than teaching are invited to give their views regarding the objectives of the school program and the content to be offered. This has been very helpful.

The superintendent sets up the machinery and acts as a resource person to help teachers develop a concept of curriculum; to decide what changes in the curriculum should be studied first; and to help define the scope of the program. Other phases may include checking to see what courses are required by state laws, and what subjects are required by the State Department of Educa-

tion, and by the accrediting agencies.

Initiate the program. The superintendent is responsible for stimulating curriculum study in the school program. His own ideas of the needs of the school should be supplemented by research studies, school visits, attendance at conferences, professional reading and discussions with school personnel. His attitude should be one that encourages experimentation. The administrator should have a thorough knowledge of the kind of program that might be planned with his particular faculty. The continuous program to be developed should be based upon the needs of children and the needs of society, as well as local conditions and needs.

Many an enthusiastic superintendent or curriculum director has begun an ambitious program of curriculum study only to discover it was received by classroom teachers with indifference and sometimes with contempt and hostility. This is not a criticism of classroom teachers but demonstrates an unrealistic approach where busy teachers are expected to display enthusiasm for an activity in which they had no part in planning. In organizing the machinery, the superintendent or curriculum leader should provide for teacher participation, teacher belonging, teacher status, and the emotional security of teachers. After all, curriculum development is largely a matter of re-education of the teacher. Thus the carrying on of a curriculum development program is a complex

social enterprise and demands the highest skills in human relationships.

Explain the program to the board of education. If the administrator is planning for a long-range program of continuous revision, he should submit the general plan to the board periodically. Local board members will be more understanding and helpful in efforts for improvement if they are kept informed of the long-range plans for betterment. Any plans that are submitted to the board should be general in nature. Board members often need an immense amount of help to understand curriculum matters. Far too often they know only the curriculum of their former school years. It is not uncommon for board members to feel that they are not qualified to deal with the curriculum. It is important that every board member accept his obligation for participation in curriculum planning. The instructional staff member should take advantage of every opportunity to discuss curriculum planning with board members. It must be remembered that the most worthwhile curriculum is one that reaches the most boys and girls.

Provide funds for curriculum study. It is not enough for the superintendent to be interested in curriculum revision, he must provide a budget that will make it possible for those engaged in this important activity to have travel funds, the necessary clerical help, and properly arranged working space. Plans for publication of curriculum materials that are developed locally are essential. These funds should not be emergency funds but should be a part

of the regular budget.

The use of curriculum consultants is very necessary. These consultants may include laymen, professional educators from local school systems as well as those from colleges and universities.

In large school systems there should be some full-time personnel and allowance for freeing teachers from classroom work for curriculum duty. Definite steps must be taken by the superintendent to assure that time is allocated for the teachers to be free to help With the curriculum study. Pay should be provided for substitute teachers who replace regular teachers who are freed to do committee work. It may be possible to make grants to selected teachers. This is a ers or other persons for summer study or workshops. This is a defensible practice in that it will provide more opportunities for teachers to learn and to enrich the local curriculum revision. These suggestions are dependent to a large degree upon the attitudes and convictions of the superintendent. He is the one who

must justify the program to the board of education.

groups to plan together.

Make possible lay participation. The educational outcomes reached by a school system depend to a great extent upon the professional growth experienced by members of the staff. Curriculum is not synonymous with writing new courses of study. It is generally realized that the understanding and coöperation of laymen are necessary for the continued improvement of the school curriculum. Administrators are willing to agree that lay participation is desirable but they often are reluctant to plan for it. This calls for many competencies on their part.

There are many advantages attached to the practice of helping the public to participate in curriculum planning. The people of the community can become aware of their responsibilities for providing better educational opportunities for the youth of the community. In cases where citizen's advisory committees have been active, the tendency has been to expand school services rather than reduce them. The school is not the only social institution concerned with children and youth; consequently, public participation in the school program provides an opportunity for several

Another benefit usually attributed to public participation is a reduction of the pressure upon the school of small but well-organized minority groups. When all constituents of a community are brought together in some advisory rôle, special interests seem to fall into their places. In this way school programs can be kept closer to the community. Lay participation can be of great help to professional educators in gauging public feeling about community needs. The aftermath of community participation in curriculum planning is a greater sense of security for teachers and administrators as they work together. Most Americans tend to support that in which they have had a part. Curriculum designers who work coöperatively with lay representatives are certain to find that citizens who participate will also give strong support when questions are raised concerning the program that has been developed together.

A COMPARISON BETWEEN CULTURAL EXPEC-TATIONS REGARDING THE RÔLE OF THE TEACHER AND HIS ACTUAL RÔLE IN THE LEARNING PROCESS

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This paper proposes to make a modest investigation of the rôle of the teacher from several viewpoints. First, we wish to examine the cultural conception of the teacher's rôle as compared to the teacher's own conception of his rôle. We are interested in investigating this cultural rôle in an effort to determine whether it is a multiple or unified one. Finally, the investigation seeks to determine whether these rôles are in conflict or in harmony with pres-

ent-day mental hygiene expectations.

It should be noted that when an adult hears the word "schoolteacher" he usually thinks of a grade school teacher in her middle thirties who teaches third or fourth grade. She is perceived as neither young nor old, and of middle class derivation. This is the cultural stereotype. Realistically, teachers are of all different ages, come from different backgrounds, are of both sexes, and teach on different grade levels. The image is accompanied by emotional tones of respect, a little fear, a little affection, some recall an expectation of reward for early struggles to learn and conform, and memories of feats of undetected mischief. This teacher stands on the border of his childhood memories, urging, beckoning, patiently teaching, and impatiently rebuking the transgressions. "Teacher says," or "Teacher wants," are associated with the pressure of this representative of society from outside the home.

The teacher is equally influenced by this image. Since the image is usually spinster, teachers who are married tend to regard themselves as "married teachers." Should she be younger than the image, she is conscious of herself as a "young teacher." And so it goes, each teacher of different sex, class, color, religion, will usually ally redefine himself against the image of a woman who is white, middle class, middle aged, and of Protestant background.

There may be some value in digressing to our mental images of

school proper. Again anthropology and sociology come to our aid. Margaret Mead, David Reisman, Erik Erikson, and others, provide us with interesting information. There are three predominant images in American minds: the little red school house, the crowded city school with its mixed nationality student groups, and the private academy.

The little red school house, although almost extinct, continues to symbolize a stable, slowly changing, democratic America. Within this image, the community is homogenous and the children are taught pretty much what their parents learned. Parents and teachers are thoroughly in league, standards are the same, and a

"licking at home means a licking at school."

The private academy, albeit no major force on the American scene, is the school to which parents, who can afford it, send their children for "the advantages of a fine education." It is rooted in the past to which the parents owed, or wished to owe, allegiance. Teachers were and are likely to be men who carry out the Euro-

pean tradition of order and intellectual discipline.

The crowded city school is pictured on the busy city block with students who are children of immigrants. Teachers are pictured as overworked with nerves frayed from the battle with the polyglot youngsters. The children are taught to read about fairy tale heroines and historical figures whose very names are strange to their parents. Teachers are seen as foster parents, i.e., they teach the children to wash, brush their teeth, drink milk, value time, and write a letter.

The teacher in all the three images cited above stands ready either to induct children into the tradition of the past or to help them enter the future by leaving their past. We must concern ourselves with how the teacher is able to carry out so significant and sensitive a rôle. The above material leaves little doubt that in all three images of schools, the rôle of the teacher is quite clear; it is to stand as a parental surrogate, and always on the side of controls.

The anthropological position is in essential agreement with the psychological analysis of the teacher's rôle, although it is couched in different terms. We, too, would say that the fact that the teacher has been placed in charge of a group of children automatically puts him in a parental rôle. He has been made responsible for the school education of these children; and, therefore, has the major

task of furthering control within them, so that their ways of behaving may become and remain socially acceptable. This rôle is reinforced or weakened depending upon the ways in which children perceive their teachers—ways colored by their relationships with their own parents. In other words, children, in part, perceive their teachers in the mold of their parents. They are not conscious of the fact that their perceptions are so colored. The teacher, too,

brings his own varied feelings to these relationships.

The good teacher should be aware of these differences in perception, both in himself and in the child, whether they be positive or negative. Whatever is the image, the teacher tries to aid the child in furthering his assessment of reality and in developing a concept of self in relation to his environment and the people in it. Through this process, real learning takes place. Here, the feelings arising from the home-based concept of reality are moved over to the school where, in turn, they become modified through the learning process. Through this learning, the child is aided in developing a social conscience, an improved perception of himself in relation to the social environment, and thus gains ego strength.

This conception of the rôle of the teacher would seem to place a large responsibility on the human being, no matter how mature, because to a degree it forces the individual in question to ally himself or herself with societal demands in opposition to instinctual drives. At the same time reasonable outlets for these drives in the child must be found through mastery of tasks, manipulation of things and ideas, and sublimation. Fortunately, the teacher is assisted in this task by the normal developmental processes taking

place within the child.

Teachers do not wish to think of themselves in this rôle although society tends to define their function in terms of the above statement. The cartoon of teachers as forbidding people offers one small Verification of this view. It would also seem that, because of having ing to assume this rôle, teachers themselves have had to deny their own drives, so that often hostility toward children is the result of the teachers' having to be such paragons of virtue. It is only realistic to agree that this would be a very complex rôle to play even if all the children in the group had the same degree of readiness for learning. It becomes increasingly difficult when, for various reasons, there are children who cannot progress.

The teacher goal is an educative one. In order to aid children

in building controls through the learning process, the teacher must be allied with the reality-testing side of the personality or the ego, and the conscience or super-ego. In other words, the teacher, in part, continues the parental rôle, and because of this, invites the transfer of feelings belonging to the actual parents. Through the day-to-day interaction with other children and the teacher, the child is helped to work through these feelings, so that he finds it possible to identify with the teacher and with his peers.

A preliminary examination of several mental health programs functioning in school systems brings into focus a variety of expectations of the rôle of the teacher. In these programs, teachers have been exposed to psychological concepts in various ways. There have been large meetings in which different psychologists and psychiatrists have discussed the dynamics of pathology. One school system held informal voluntary meetings in which teachers raised both general and specific questions, The mental hygiene worker encouraged mutual sharing of experience and utilized the discussion to open areas of child development.

This same system carried on a program of individual conferences with teachers about children in treatment and those with whom they were having classroom difficulties. Weekly seminars on a teaching and clinical level were held with counselors. In addition, informal unorganized discussions were held in hallways, lunchrooms, and school offices, the value of which was principally to strengthen relationships between teachers and the mental hygiene personnel.

It can be easily seen that most acceptable educational techniques were utilized, ranging from the most superficial, the large lecture, to the most intensive, the individual clinical conference. The apparent purpose in all of these meetings was to acquaint the teachers with the instincts, their vicissitudes, the defense mechanisms, the dynamics of symptom formation, and some suggestions regarding the handling of problems. The obvious expectation was that the teachers would be strengthened by the addition of such knowledge. The teacher who might be confronted with an overaggressive youngster could then correctly diagnose the cause of the aggression, i. e., anxiety, guilt, or sheer hostility; and handle it accordingly. Such success did not occur in these school systems, and there was a subsequent reassessment of the programs.

Before considering some of the reasons for failure, we might

examine at this time the rôle of the mental hygiene workers, whether they be psychiatrists, psychologists, or social workers. All seek to aid children with emotional problems. As noted earlier, the teacher's goal is an educative one. This is not the therapeutic process of unearthing and actually inviting expression of repressed instinctual drives, but rather a modification through reality operation. Neither does the teacher concern himself with a loosening of the defenses in a therapeutic sense, but rather attempts to accomplish a gradual modification or strengthening of them by a focus on the appropriateness of reality response without a cruel forbidding of, or direct attack upon, the inappropriate defense mechanisms.

In contrast, the mental hygiene worker has a therapeutic goal. It involves the process of re-education. Here the child is reacquainted with earlier drives and defenses against them (an intense form of revival of old feelings), and is helped to reorganize those drives to form new and healthier defense mechanisms and controls. In this process, the therapist accepts the presence of all drives. He does not need to restrain their verbal expression because of possible contagion which might be a threat to the defenses of the other children in a classroom, possibly causing group disruption.

The difference between the rôles of teacher and of therapist and the difference in training for these rôles make the infantile instinctual demands more acceptable to the therapist, and in a sense, less acceptable to the teacher. It is for the socially-acceptable control of these demands that the teacher has been working. It must not be inferred by this that teachers do not try to understand these drives and do not try to be sympathetic with the anxiety raised through vicissitudes in these areas. However, if one is to teach skills and social responsibility, one cannot allow free reign to these drives. Learning is a process of giving up pleasurable activities inappropriate for the time and place for substitute satisfactions, or for the promise of probable later pleasures.

In culling the experiences of the mental hygiene workers in these school systems, certain common experiences were revealed. As the programs developed, they created anxieties and resistances in some teachers whose adjustment was threatened by them, i. e., authoritarian, rigid teachers redoubled their efforts to isolate themselves from children, while timid and uncertain teachers became

more and more confused in their relationships with children. Further, it became clear that the mental health personnel were possessed of certain expectations in respect to teachers. Some of the more common ones were the following:

(1) It had been assumed that teachers had a broad background

in mental hygiene and the dynamics of human behavior.

(2) It was felt that teachers understood their own rôle.

(3) It was expected that a teacher conversant with mental hygiene could be an active member of the therapeutic team.

(4) It was hoped that teachers were stable personalities who could not be affected by clinical material, and would not relate it

to themselves.

It became clear that the first three expectations were based upon misconceptions. Teachers were, at best, exposed to various courses in mental hygiene before being thrown into the battle. Some older teachers had never received help. Further, there were many gradations in their conceptions of their own rôle. And most importantly, teachers could not be expected to be members of a therapeutic team because this position tended to overlook the teacher's rôle as an educator concerned with the control side.

Some teachers, in their identification with the therapist and his permissive rôle, disrupted their own organized techniques for control. Their pupils sensing the change became disturbed in their behavior. These teachers, who were attempting to synthesize teaching and treatment, perhaps sensing their own problems in this behavior, reacted with anxiety, withdrawal, or became hostile

to the mental health program.

An evaluation of these programs brings the realization that they confused the teacher's perception of his rôle, since it was not made clear that to understand a child was not the same as permitting the acting-out of their impulses. These programs failed initially for they failed to appreciate the control function of the

This failure could be attributed to an inability to recognize that this has been the history of the educator's classical rôle, as supported by both anthropology and psychology. Moreover, there was failure to perceive the logic in the choice of the vocation by teachers. In the brief anthropological discussion in the earlier section of this paper, it was suggested that there is an image of a stereotype teacher in the mind of everyone and that this image is associated with surrogates of parental control. It would seem that any effort to confuse or change this rôle or image must be sensed by the individual as a threat to his adjustment. Parenthetically, mental hygienists have tended to overlook the very basis for the vocational choice of teachers, i. e., a person identified with the parent and control and not with occupations that need to accept poor control.

To conclude, it would apear, therefore, that mental health programs in school can only help the teachers in the following ways:

(1) Mental hygiene must translate its material into educational

concepts and techniques.

(2) This material must be focused in the direction of giving teachers continuous support by offering them general acceptance of their feelings that arise out of the teaching process.

(3) Mental hygienists must accept the logic of the cultural expectations of the teacher's rôle as being a parental surrogate and within which rôle the teacher assists in the transformation of primitive feelings by teaching acceptable sublimating activities.

(4) It must be seen that mental hygiene's greatest contributions can only be in the direction of helping teachers become more ef-

fective teachers, not part-time therapists.

REFERENCES

(1) R. W. Coleman, E. Kris, and S. Provence. "Variations of Early Parental Attitudes," Psychoanalytic Study of the Child, Vol. 8, 1953. New York: International Universities Press.

(2) Erik Erikson. Childhood and Society. New York: W. W. Norton and

Co., 1950.

(3) Margaret Mead. Male and Female. New York: W. W. Norton and Co., 1950.

(4) David Reisman, The Lonely Crowd. Glencoe: Free Press, 1948.

(5) M. Wolfenstein and N. Leites. Movies: A Psychological Study. Glencoe: Free Press, 1950.

PROBLEMS AND SUPERVISORY ASSISTANCE

LUTHER E. BRADFIELD

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Data concerning elementary school teachers, their problems and extent of supervisory assistance, were obtained as a result of a study of fifty selected elementary schools in Arkansas.¹ These schools were selected on the basis of membership in the North Central Association of Colleges and Secondary Schools. After permission had been granted by the superintendent of schools, one elementary school from each of the school systems granting this permission was included in the study. It was assumed that these schools were probably among the better schools of the state since they were members of the highest accrediting agency.

The 472 completed questionnaires which were returned represented 63 per cent of the complete sample of teachers in the 50 schools. The schools had an average of approximately 15 teachers per school. An average of nine teachers per school responded. These teachers were divided somewhat equally according to grades one to six in the distribution. A small percentage of teachers indicated they taught two or more grades or worked in a departmentalized situation.

Approximately 84 per cent of these teachers had from 25 to 40 pupils in the classroom. While three per cent taught less than 25 pupils and some 13 per cent taught more than 40 pupils, slightly more than 34 per cent of the teachers had a pupil load in the range was divided somewhat equally with the first grade teachers haverage. The typical teacher participating in the study had a pupil load of 30 to 40 pupils.

Almost one-third of the respondents had taught 20 years or more. A larger number of teachers of grade one had taught for 20

¹Unpublished doctoral dissertation by the author. School of Education, Indiana University, Bloomington, 1953.

years or longer than was true of other teachers reporting. Teachers of the other grades were very similar as far as teaching experience was concerned. The typical teacher had taught from 10 to 14 years. However, about 90 per cent of the teachers had taught for three years or longer, and 65 per cent had taught 10 years or more.

Although 26 per cent of the teachers had been in their present position for five to nine years, the typical teacher had been employed three to four years in her present position. Information revealed that a large per cent of teachers had taught 20 years or more, but only a relatively small per cent of them had worked in their present positions for that period. However, a few teachers indicated they had spent all their teaching time in the position held. About 47 per cent of the teachers had been employed where they were working for five or more years, while only about 21 per

cent had taught in that position for ten years or longer.

More than half the teachers responding to the question indicated they had completed four years of college work and held a bachelor's degree. The next largest group was composed of those with three or more years of college training. Those doing work beyond the bachelor's degree and those with under three years of college work were divided about equally in number. The typical teacher in the study holds a bachelor's degree. It was noted that a large number of teachers who had taught for 20 years or more did not hold a degree. On the other hand, practically all beginning teachers and those who had taught from one to four years had completed four years of college training and held a bachelor's degree. The amount of training in colleges and uni-Versities, and consequently, the degrees held by teachers are im-Portant factors in determining North Central Association membership. These factors may account for the fact that a majority of teachers included in the study had bachelor's degrees. Teachers With degrees were distributed rather equally among the various grades. It was observed that about 65 per cent of the teachers reporting the item had completed four or more years of college training and about 95 per cent had completed at least three years of college work.

A few cases were observed in which the teacher had a degree in some other field but was teaching in the elementary school. A few cases of unhappiness and insecurity were observed due to teaching a grade level for which little preparation was made, or because

of being a much younger and inexperienced teacher, and hence, not able to "compete."

Teachers were asked to indicate if certain teaching responsibilities were problems for them. A list of items was suggested other than those directly related to teaching subject matter areas. This information was sought in addition to that of determining the one teaching problem which in the opinion of teachers was the most difficult for them. In both instances where teachers were asked to identify teaching difficulties the problem of providing for individual differences among pupils appeared to be the most crucial among teachers who responded to the question.

Results of the study revealed that the most difficult teaching problems of teachers in the selected schools were the following: providing for individual differences; recognizing and diagnosing pupil difficulties; finding time for individual and remedial work; evaluating pupil growth and development; and teaching in overcrowded conditions. These problems may be classified as problems

dealing with diagnosis, remediation, and evaluation.

Slightly more than 50 per cent of the total number of teachers responding to each item concerning the extent of supervisory assistance with recognized teaching problems reported adequate help with the following problems: classroom management and routine matters; selecting materials and equipment; school-community relations; and providing a pleasant school environment. Problems with which the least percentage of teachers reported adequate help included the following: providing for individual differences; developing units and other teaching materials; providing for group participation and study; evaluating pupil growth and development; recognizing and diagnosing pupil difficulties; and formulating teaching objectives. Teaching problems with which the largest percentage of teachers reported no help included: developing units and other teaching materials; planning and organizing the daily program; methods and procedures of teaching; and providing for group participation and study. Problems with which the largest percentage of teachers reported assistance to at least some extent were: providing a pleasant school environment; providing for needs and interests of children; growing professionally as a teacher; and school-community relations. About 44 per cent of the teachers reporting extent of supervisory assistance with recognized problems indicated the help was adequate.

Teachers indicated that much of the assistance they received was concerned with routine administrative matters. However, they considered their supervisory leader as a co-worker in the school, and they felt that an attitude of kindness and understanding was maintained by this leader. Teachers reported that they felt free, with few exceptions, to take their problems to this responsible supervisory leader.

In the schools studied, the person most directly responsible to teachers for supervision was the elementary school principal. This was true in a vast majority of the cases. Only seven of the 50 schools included in the study, or about 20 per cent of the total number of teachers, have elementary supervisors. In 32 of the 50 schools the principal was a woman. Many of the principals were

teaching principals with dual responsibility.

It was found that teachers rated those supervisory procedures related to democratic leadership, good human relations, and group action as the most helpful groups as a whole. Teachers wanted a certain amount of freedom to decide and plan, within a framework, methods and materials to be used, and in developing the classroom program to meet the needs of the pupils. They wanted to be given freedom and opportunities to present any problem to the supervisory leader and to discuss ways and means for dealing with it. Furthermore, teachers wanted to feel a sense of belonging and personal worth, and they wanted supervisory leaders to be available who would assist in creating an informal atmosphere and release tension for more effective group participation.

The following conclusions were drawn from the study concern-

ing problems of teachers and supervisory assistance:

(1) The most difficult problems of teachers deal with providing

for the wide range of difference in pupils.

(2) Teachers place much emphasis on proper diagnosis of pupil difficulties as a requisite for dealing with individual needs of children.

(3) Generally speaking, teachers are concerned with children

as individuals, for their growth and development.

(4) Teachers are receiving sufficient help with routine adminis-

trative matters. (5) Teachers sense the need for more assistance with problems related to diagnosis, remediation, and evaluation in working with children.

(6) Teachers are not being sufficiently assisted with effective ways and means of working with children in the classroom.

(7) Teachers need more help with developing and using mate-

rials for purposes of instruction and evaluation.

(8) Teachers consider the attitude by which supervision is given more important than the procedures used. They want supervision which is coöperative, helpful, and which provides a pleasant atmosphere.

(9) Teachers want supervisory assistance from a democratic leader who helps with suggestions, yet permits freedom of initiative, choice, and independence in carrying them out in the class-

room.

(10) Teachers want the type of supervision which makes them have a feeling of belonging and personal worth in the school. They consider the availability of a supervisory leader who is understanding and sympathetic most helpful to them.

SALARY POLICIES AND TEACHER MORALE

B. J. CHANDLER

Northwestern University

It is time for the profession to subject policies and procedures of teacher salary administration to rigorous research. A step in that direction is described in this article.

The profession needs to find out if salary policies and administration are related to teacher morale, pupil achievement, teacher turnover, job satisfaction, financial support for the schools, and attitudes of citizens toward teachers. While the research reported here deals with only one aspect of the problem—the effects of salary policies on teacher morale—it is hoped that this study provides a design for and points the way toward additional research.

Several assumptions underlie the investigation reported here. It is assumed that: (1) the phenomenon of change characterizes personnel policies, including salary policies and practices, (2) morale is made up of many identifiable dimensions, (3) merit schedules can be described in words that generally communicate, (4) there is a relationship between morale and merit schedules, and (5) fundamental hypotheses about the relationship between morale and merit schedules can be stated and tested through reliable research.

Statement of the Problem. It was the purpose of this study (1) to work out a research design for the study of the effect of school Salary policies on teacher morale, (2) to design and validate a teacher attitude inventory that will measure teacher morale, and (3) to determine if teacher morale is significantly related to salary policies in a small sample of school systems.

Limitations of the Study. No effort has been made to ascertain the factors that determine teacher morale. Efforts were restricted to establishing whether or not there was a significant difference in teacher morale in school systems that are similar except for use

of merit or single salary schedules. It is recognized that the sample in this study is too small to justify definitive conclusions. Also, the sample contains school systems that are located in suburban communities in the Chicago

area.

A further limitation grows out of the lack of commonly ac-

cepted meaning of terms such as merit schedules and morale. However, these terms have been defined for purposes of this study.

Hypotheses. The hypotheses selected for testing are as follows:

- (1) There should be morale differences between a school which uses a merit schedule and a similar school which uses a single salary schedule.
- (2) Such differences in morale that exist should be in the direction of lower morale in school systems that use a merit salary schedule

(3) The interrelationship and interaction of numerous factors acting together determine the morale of a school staff.

Participating School Systems. Ten suburban school systems to the north and west of Chicago, Illinois, were selected to participate in the study. Of the ten, two are large senior high schools, two are small senior high schools, and six are elementary schools -kindergarten through eighth grade. Two high schools and three elementary schools which use a merit schedule were selected first. Then an effort was made to match each of the five schools with a school system that uses a single salary schedule. Factors considered in matching the schools included: (1) located in suburban communities with similar socio-economic population, (2) number of teachers, (3) true value of property, and (4) current expenditure per pupil in average daily attendance.

Of the 614 teachers who completed the Attitude Inventory, 336 were teaching in merit schedule schools and 278 were in schools that follow a single salary schedule. Five of the school systems had adopted a merit schedule while five followed the single salary

Table I presents the analysis of variance for the test data grouped on the basis of schools, regardless of the type of pay plan

TABLE I.—ANALYSIS OF VARIANCE OF DATA GROUPED ON THE BASIS OF DIFFERENCES BETWEEN ALL SCHOOL

Source of Variation	DETWEEN ALL SCHOOLS				
Schools Within Sets Totals	9 604 613	Sum of Squares 6,119 79,787 85,906	Mean Squares 679.89 132.09	F 5.15	.01

TABLE II.—ANALYSIS OF VARIANCE OF DATA GROUPED ON THE BASIS OF DIFFERENCES BETWEEN MERIT AND NON-MERIT SCHOOLS

Source of Variation	df	Sum of Squares	Mean Squares	F	Р
Merit, Non-Merit Within Sets	1 612	284 85,622	284.00 139.91	2.03	_
Totals	613	85,906			

(merit or non-merit) used by the school. The raw data utilized for the analysis of variance in Table I consisted of the Attitude Inventory scores for individuals in each of the ten schools. The analysis of variance procedure used in the treatment of these data followed that suggested by Lindquist.

Table II presents the analysis of variance for the test data grouped on the basis of merit as compared to non-merit schools. In this instance, schools which use a merit pay plan were compared to schools which do not use a merit pay plan in order to determine if a significant variation in test data existed between the two groups

Table III represents an analysis of variance based on a grouping of the data in a way that would allow for a test of variation between choice or response endings in the test. Table III is organized in a manner similar to Tables I and II, and the explanation for Table I applies to Table III, also. The variable tested was found to be significant at beyond the one per cent level of confidence.

Conclusions. The statistical results permit the following conclusions:

(1) A significant difference in level of morale, as measured by

Table III.—Analysis of Variance of Data Grouped on the Basis of Differences retween Choice of Response Endings

DIFFERENC	ES BETWE	EN CHOICE	JF TUEST		
Source of Variation	df	Sum of Squares	Mean Squares	F	F
Response	3		2,430,166	167.69	.01
Within Sets	196	2,838,616	14,403		
Totals	199	10,129,115			

the Attitude Inventory, exists between schools involved in the research.

(2) No significant difference in morale level, as measured by the Attitude Inventory, exists between schools grouped on the basis of type of salary schedule (merit versus non-merit).

(3) Individuals within each school tended to approach the Inventory in a similar manner, indicating a common frame of

reference relative to level of morale.

(4) From the analysis of the data, morale appears to be a general function of a multitude of interrelated variables rather than a function of one or more isolated variables.

(5) The type of salary plan utilized by a school system (merit or non-merit) is not a significant variable in isolation relative to

the determination of morale level in a school system.

Additional research needs to be done on various aspects of the general problem of morale of personnel in a school system. The relationship between morale level of teachers and pupil achievement needs to be investigated. Do students who attend a "high morale" school actually learn more?

Is there a significant difference in morale of "good" teachers and "poor" teachers? Do the better teachers in merit schedule schools have higher morale than the poor teachers? Does the single salary schedule tend to depress morale of the better teachers? Is there a relationship between financial effort to support schools made by a community and salary policies of the schools?

THE PRINCIPAL AND THE STAFF BULLETIN

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The need for improvement of communication merits a high priority in the plans and practices of school administrators and supervisors. Communication of the formal nature is often approached by face-to-face meetings, faculty meetings, and incidental contacts between teacher and principal within the building. This article represents an attempt to define a manner of improving communication by staff involvement in the process, a type of involvement in which all staff members and pupils can participate.

The author discovered the excellent possibilities for improving communication by writing a bulletin to the staff. Dittoed copies of the bulletin were distributed to the nurse, custodial staff, and teachers who often posted the bulletin on the classroom bulletin

board for perusal by their youngsters.

A monthly calendar in the teachers' room listed all the meetings (building and district) for the particular month; duty schedules (bus, yard, cafeteria) were also posted in the teachers' room and placed in the teachers' mailboxes; thus, the staff bulletin concen-

trated upon curriculum matters.

A deliberate attempt of the staff bulletin was to harness and preserve some of the fine learnings and activities found in the Various classrooms. Initially, the principal posed questions, i.e., "Have you noticed the charts in room 8?", or, "Did you see the science project in room 10?" Reference to classroom activities in progress helped to create an awareness of the school as an entity, not simply an assortment of classrooms; this in turn gave cognizance to a variety of teaching techniques, and most important of all, a recognition of individual pupils whose stories, letters, and poems were sometimes included in the bulletin.

Noting the creative writing talent of a sixth grade teacher, the principal asked him to write biographical sketches of staff members. This was done in a humorous, appealing, manner that fostered better acquaintance within the staff. Later in the year other teachers were asked to write a few paragraphs to describe a fellow

staff member. Limitations of a teacher's time need to be considered when the principal requests special written efforts from them.

In a gradual manner, without imposing a deadline, the principal asked various teachers to write an account of their way of working in different areas. A teacher who was fond of teaching music related numerous suggestions for developing a daily program of classroom music activities. Quite often, appearance of an article in the staff bulletin elicited questions, comment, and discussion from the staff. Contributors were recognized in this manner; hence, they were able to amplify their written articles. To stimulate increased interest in science several teachers described a current science activity in their rooms which induced other staff members to inquire about the activity, thereby lending impetus to an improvement in the school science program.

Occasionally the principal found teachers who declined an opportunity to report their own experiences; however, some of these teachers contributed in other ways. As an example, two of these teachers related their experiences in taking a language arts course from a given instructor when the course was repeated in the district by the same instructor.

Another example of a teacher contribution to the staff bulletin was in the field of professional publications. Several teachers reviewed new publications which in turn increased the circulation of these publications. A teacher with a master's degree in geography reviewed a journal in that field. A teacher with strong inacquaint the staff with articles in current periodicals, the princioriginal source.

Notes taken during institute in-service meetings by teachers and principal were also included in the bulletin which appeared about three days per week. Visits from the district curriculum director and curriculum consultants were sometimes followed by their written impressions of particular aspects in the daily program.

Pertinent articles from neighboring school bulletins were reprinted with the consent of the school where the article originated. Here again is an example of how school district publications can adapt material developed within a given school. Through the reading of these bulletins the central office staff can become better

acquainted with building personnel. Successful practices and ideas may be adapted for consideration as possible use in other buildings; however, a person at the district level would have to promote this development provided that it were regarded as being of sufficient value.

Foremost in interest and readability of the contributions in the school bulletin were those written by the children themselves although these articles represented a compilation from classroom newspapers or samples of work that had been developed in the classroom. In order to portray the range of abilities and achievements found in a particular classroom, the principal either selected the materials or arranged for the children to designate their choices. If the school secretary had ample time for typing and duplication, the stories from all the children in a particular room were printed in the bulletin.

Encouragement from the principal for the teachers to write articles has given the staff a confident feeling that individual contributions are sought and recognized; also, new talent has been discovered, making more resources available within the staff. The bulletin may be the first opportunity of this type ever suggested to a teacher; moreover, the articles occasionally help a teacher to discover that he possesses skill, facility in written expression. Perhaps teachers will help boys and girls to express themselves

more adequately in their written endeavors.

Dissemination of routine notices and announcements in the staff bulletin minimizes the need for detailed discussion of those items at staff meetings which then allows more time for consideration of curriculum aspects, a worthy goal for faculty meetings. Presentation of reports by teacher committees in the bulletin can serve as a record of committee progress. Classroom interruptions can also be reduced in frequency by means of regular printing of the school bulletin since the teacher can then schedule a regular time for announcements.

The staff bulletin is an aid to improve communication, not a substitute for direct personal contact among individuals. Granted that the principal's time is required in the preparation of the bulletin, the time can readily be justified, because essentially the content of the bulletin is based upon the needs of the building, and these needs are sometimes better met by written focus upon

them.

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Should you desire to begin a staff bulletin in your building it may be well to keep the following guidelines in mind:

(1) Initially you will be required to do all the writing.

(2) Involve teachers on a gradual basis.

(3) Let the staff determine the value of the bulletin.

(4) Alert yourself to become better acquainted with your staff so that you can solicit participation based upon the strengths of individual teachers.

BOOK REVIEWS

Anne Anastasi. Differential Psychology: Individual and Group Differences in Behavior. Third Edition. New York: The Macmillan Co., 1958, pp. 664.

The valuable contributions of this author are continued in this third edition which is partly a revision and partly a rewriting with condensations and some changes in emphasis. Reorganization of material has been considerable, 24 chapters being reduced to 18, and a corresponding shortening of the book as a whole makes it "more suitable for one-semester courses."

The chapters as reworked include some historical orientation in the field of individual differences, distribution and extent of these differences, and as bearing upon them, heredity and environment, physique and behavior, types, training, age, family, trait organization, mental deficiency, genius, sex, class, race, and culture.

Topics expanded or introduced for the first time include, "effects of early experience upon subsequent behavior, the rôle of physiological factors in behavior, long range studies of population changes, longitudinal follow-ups of children and adults, intellectual functioning, in maturity and old age, age differences in personality traits, applications of factor analysis, development of multiple aptitude batteries and the profile approach in the measurement of individual differences, the relation of perception and personality, the nature of creativity, and research on culture and personality in the study of national and ethnic groups."

The aims of the author are primarily to clarify the "basic mechanisms of behavior," to better coordinate the material that has been generally put together rather loosely, and to put special emphasis upon "the examination of common pitfalls and sources of error in the interpretation of obtained results." Sober, factual reports, carefully written and at times absorbingly interesting, should help to relieve the popular tendency to superstitious theories and explanations. There are many warnings against not acceptable methods, against interpretations that "are vague and confused," and against those that mix "literal and figurative

concepts indiscriminately."

Controversial subjects are not dodged. As with other topics, they

are treated from the factual point of view, many studies being reviewed, but, in some cases at least, readers (some especially) will no doubt conclude that much more, psychological, sociological, and historical, needs to be brought in scientific focus and interpretation, not so much a fault of this book, as typical of the

interpretative surveys of the present time.

Excellent selective references are at the ends of chapters, following chapter summaries. The style is clear and statements easily understood, the jargon of philosophical and mystical psychology not being used. In this immense field, this is a worthy condensation, excellent as a text, and adapted for general reading by those with a minimum of psychological vocabulary. The book is recommended for both purposes. A more complete study of any of the included topics can easily be made by the use of the bibliographies.

Very satisfactory Author and Subject Indexes conclude the

book.

A. S. EDWARDS

The University of Georgia

ALLEN L. EDWARDS. Statistical Analysis, Revised Edition. New York: Rinehart and Company, 1958, pp. 234. also Workbook to Accompany Revised Edition of Statistical Analysis. New York: Rinehart and Company, 1958, pp. 76.

This author of excellent texts on statistics has largely rewritten the 1946 edition, eliminating much of the older book, and adding a considerable amount of new material. The emphasis is on understanding statistics with a minimum of computations and what might be called "busy work." The volume is planned for "the non-mathematically trained student."

Following the introductory information and advice to the student, in the first chapter, the other fourteen deal with variables and scales; frequency distributions; measures of central tendency; measures of variability; the correlation coefficient; elementary probability theory; sampling from a binomial population; random sampling distributions; the normal distribution; the t-test for means; introduction to the analysis of variance; the x3 test; measures of association and tests of significance; and samples of research.

Reviews of terms and of symbols are at the ends of chapters; formulas are listed (pp. 183-89). Six tables, in frequent demand by students, are included in the Appendix (pp. 191-225).

The Workbook with stiff cover and large notebook size pages, follows the plan of the main text-emphasis on understanding and a minimum of the more or less simple computation. Each chapter of the Workbook provides a review for its corresponding chapter in the main text. The exercises are planned to "enable the student to test his understanding of the text and also to test his ability to apply what he has learned." The two books provide a

well planned unit of study and work for students.

The author has achieved much of clearness with brevity, and of interest without distraction by too many details. But if the student reads the preface, he may well wonder how much will be "intuitively meaningful." With its many excellent features, the book might have been further improved by putting the symbols in the Index, or at least in a special glossary for quick reference. Some might wish that a distinction had been made between statistical and practical significance (too commonly omitted from texts on statistics).

The text or the text with the workbook deserve careful consideration for adoptions, especially as planned for "psychology,

education, and the behavioral sciences."

The volume includes References (pp. 179-180), and Supplementary Readings for Chapters 2 through 15 (p. 181), and concludes with a well made Index.

A. S. EDWARDS

The University of Georgia

Morris Krugman, Editor. Orthopsychiatry and the School. New 1958 York: American Orthopsychiatric Association, Inc., 1958, pp. 265.

The deeply psychological applications of orthopsychiatric work appears in this volume which endeavors to bridge the gap between orthopsychiatry and the school. It supplements the work of mental health and of texts on adjustment, a considerable number of which have come from the press in recent years.

This collection of papers comes from meetings of the American Orthopsychiatric Association; papers and symposia held at annual meetings and articles sent to the Journal were considered for selection and those considered as sufficiently bearing on the subject were included. The list of contributors includes 36 names indicating the authors or coauthors of the 26 articles included. Various disciplines are represented, psychology, medicine, psychiatry, teaching, administration, and trained social workers. The many points of view are presented in preference to a single or a unified point of view.

Following an Introduction which explains somewhat the meaning of Orthopsychiatry and its relation to education, the book is divided into four parts: Orthopsychiatry's help to education; Orthopsychiatry and problems of learning; Orthopsychiatry and school mental health; and, Teacher education in mental health. The school periods included are from kindergarten through adolescence, and also, problems of college and university students, and those of teachers.

Emphasis is placed on mental health and learning, and upon problems that are both matters of teaching and of mental health together. There is on the part of all authors, a recognition of the need for and place of therapeutic education, not wholly as a substitute for, but as a supplement to and a regular part of regular teaching.

If some of the statements seem a bit naïve and overenthusiastic, it may be said that very much of the matter presented, is in the reporting of what has already been found to work and to bring about beneficial and changed attitudes in both students and teachers. The many points of view brought together are of disoff the book. In general, extremes are avoided and good judgment obtains.

The style is simple and interesting. The authors are all special students of the fields in which they write. The book is without an index but perhaps none is needed.

RENSIS LIKERT AND SAMUEL P. HAYES, JR., Editors. Some Applications of Behavioural Research. Paris: United Nations Educational, Scientific and Cultural Organization, 1957, pp. 333.

This is the second volume by UNESCO in the collection of Science and Society, with the purpose of spreading "knowledge of the practical effects of the discoveries made in the various branches of the social sciences." "Each chapter is the result of a carefully planned and thoroughly worked-out process, and thus represents a fusion of behavioural research results, of the experience of business and other organizations with the problems on which the research bears, and of a joint estimate of the applicability of the research findings to such problems. . . . American research not so far reported at the Foundations meetings... has been omitted."

The eight chapters have been written by different authors who are Rensis Linkert, Stanley E. Seashore, Hollis W. Peter, Simon O. Lesser, Francis S. Bourne, Irving Morrissett, and Samuel P.

Hayes, Jr.

The subjects of the chapters are behavioural research: a guide for effective action; administrative leadership and organizational effectiveness; training of leaders for effective human relations; human factors in research administration; training foreign nationals in the United States; group influence in marketing and public relations; psychological surveys in business forecasting; and, relating behavioural research to the problems of organizations.

Interest lies in scientific studies that contribute to a better organization of social behaviour, with special emphasis upon industrial management and the training of leaders. Included are psychological, sociological and anthropological studies. Annotated

Bibliographies conclude each chapter.

The richness of the contents can only partly be indicated in a short review. Reports include many subjects: age and performance, etc.; consumer attitudes, consumer behaviour, and change of attitudes; interests and motivation; group influence; training in human relations; many problems of leadership and training for it; creativity and productivity; surveys and sampling; and many details and warnings in connection with scientific study. The richness is not indicated quite as fully by the Index as might be. The book is written with a minimum of technical terms and can easily be read by those who are interested in the subject. It avoids the pitfalls of popular write-ups but one who begins to read will probably continue with a good deal of interest. The publication performs a useful service in bringing this material to those who desire statements from those who are especially competent in their respective fields.

A. S. EDWARDS

The University of Georgia

TRIGANT BURROW. A Search for Man's Sanity: The Selected Letters of Trigant Burrow. New York: Oxford University Press, 1958, pp. xxi, 615.

Prophet of a new concept, apostle of the deeper understanding, Dr. Burrow was willing to dedicate his life to the discovery of a better understanding of the house with the best of the discovery of a better understanding of the house with the best of the discovery of a better understanding of the best of the discovery of a better understanding of the best of the deeper understanding of the best of the deeper understanding.

The Letters (called by one person "natural poetry") seem to admit a more than usual gift for obscurity in his publications; but which is particularly obscure. Perhaps then, his writings simply letters attempted to clarify the difficulties of his other writings. Again, perhaps, as Burrow noted from a suggestion of Sherwin Adams, what he is writing could be said only in poetry.

As chapter succeeds chapter (there are 15), the development of Burrow's thinking appears and a progressive clarification emerges. Youth, marriage, children, home problems, friends, professional (with emphasis on the phylo), and finally "ditention" and "cotenfoundation develop. Sorrows, failures and the beginnings of success are noted.

A biological or physiological psychology emerges and is unrecognized or not accepted by psychologists. Psychoanalysis is lysts. Innermost probing and is not acceptable to psychoanations are pushed to extremity and physiological apparatus are used to give objective evidence of the difference between "diten-

tion" (the disease of all men) and "cotention" which may be man's salvation.

References to various scientists and philosophers are interesting and may lead some readers to look up some of the publications they have missed in this rushing world in which man (all men, without exception) is sick.

The deep desire to bring "a new concept of human life to human beings" (p. 327) is equalled with his belief that it is possible and

that he may by searching find sanity.

The book may be read for the story of developing "phyloanalysis" after Burrow had become "sick at heart with what has been called psychology" (p. 321). It may be read as the story of a pioneer whose life was dedicated to a great purpose from which no obstacles could deter or deflect him. It may be read with the interest of one concerned with the attempts of those who seek to find the cause (or causes) of mental disorders, especially, of "society's illness," and to work for "sanity and health."

Bits of humor appear occasionally and editorial notes give con-

tinuity where the letters do not.

The book is of more than usual interest and may persuade many readers to read at least the frequently mentioned and mature statement of Burrow's studies, "Science and Man's Behavior," which includes the text of "The Neurosis of Man."

The volume concludes with a Bibliography of Burrow's published writings (pp. 595-601), and a reasonably adequate Index.

A. S. EDWARDS

The University of Georgia

WALTER CROSBY EELLS, Compiler. College Teachers and College Teaching. Atlanta, Georgia: Southern Regional Education Board, 1958.

This work is an annotated bibliography on college and university faculty members and instructional methods. The compilation includes 2665 entries covering the recruitment and selection, and the institutional status of the college teacher; teaching conditions, teaching methods—general, and teaching methods—special fields. References pertaining to academic freedom, curriculum, counseling ing and guidance have been omitted deliberately. Helpful information concerning the need for such a bibliography, organization of material, and method of compilation is included in an introductory section. Seven separate indexes contained in the final

twenty pages assist the user in locating desired entries.

The bibliography was found useful by a four-member team from Goshen College at the 1958 Danforth Campus Community Workshop held on the Colorado College campus. The team project was "The Improvement of Instruction in the General Education Courses at Goshen College." Members found the book under consideration helpful in locating references pertinent to the various aspects of the team project.

Goshen College

KARL MASSANARI

ELI GINSBERG. Human Resources: The Wealth of a Nation. New York: Simon and Schuster, 1958, pp. 183.

This volume vividly presents in small compass the need of using human resources to their fullest in the United States today. The facts and ideas therein are soundly based upon studies under The Conservation of Human Resources Project established at Columbia University bia University in 1950. Since school education aims at the effective development of the potentialities of our youth, Ginsberg's book is highly useful to educational administrators, teacher educators, and to teachers themselves.

Public awareness of the need of a national manpower policy was aroused in the midst of World War II through the waste exposed by the rejection of too many young men for military service due to mental or emotional defect. Thus the crucial responsibilities of the public schools were re-emphasized. While the chief sources of wasted manpower described by Ginsberg as an economist include unemployment, underemployment, and imperfections of the labor market, the inadequacy of the community investment in education and training facilities justifies primary attention by all citizens for two realistics justifies primary attention by all citizens for two reasons. First, there is greater possibility of quick and intelligent contact. and intelligent control of school policy than of the operation of the economic system upon which full employment depends. Second. the many work ond, the many weak spots in the educational system have been identified already by identified already by schoolmen, and techniques are available for exposing and remedying other defects as they may arise.

Ginsberg's economic analysis of the current educational situation will be helpful to the school administrator or teacher educator because it faces two ways. It points outward from the school toward the public, showing the citizen how the general welfare depends upon the program of financing the public services, notably education. It points inward to the defects in the school system, which the typical school staff may be engaged in remedying. Here then is enlightenment in economics and education for both the lay citizen and the teacher in the school.

In dealing with the full development and use of our resources of talent and superior performance, at the outset Ginsberg wisely acknowledges that in spite of advance beyond social and psychological determinism our knowledge of the source and nature of high ability "remains incomplete" (p. 70). Accordingly, emphasis is placed upon the subtleties of human motives and related conditions that retard or promote "a high potential to learn, retain, and use what is learned" (p. 76). For example, why had "5000 soldiers Who had scored in the top mental group . . . never gone beyond the eighth grade?" Why does "one out of every three of the intellectually ablest fail to enter or graduate from college" (p. 72)? Through a multitude of such facts our wasting of talent is illustrated. Also, warning is given against letting an interest in the highly "creative few" lead to ignoring "the larger group from Whom they draw their strength," and we add, from whom emerge at times talents not revealed by the IQ tests. Both economists and schoolmen recognize that "the wealth of a nation" depends largely upon the "common folk." So attention to motivation is fundamental at every level of capacity and at every stage of education from the kindergarten to the graduate school.

Mention is made of the difficulty, due to changing social conditions, of determining leadership qualities in advance (p. 74), and even of appraising the results of leadership until long after the administrator has retired (p. 84). These warnings may contribute significantly to the caution with which the school exercises its opportunity to channel more or less talented youth into the new world of work that is opening before the present generation. In this connection, the author lists three ideals for a democratic society: (1) the right to choose one's own work; (2) access to the education needed to qualify for that work; and (3) opportunity to utilize effectively the education and training obtained. Cited as notable exclusions from these rights at present include women,

Negroes, and those of both sexes and all races past sixty years of age. It becomes clear that today's advisors of youth need wide knowledge of current vocational opportunities and a deep understanding of differing individuals to help them to exercise wisely their right of choice for their own welfare and that of society.

In a book covering so much fertile ground in so few pages an author may be excused for apparent imbalance here and there. It would appear, however, that the statement "a man's wife frequently exercises a restraining influence on his progress" (p. 91) should be matched with mention of the contributions so often made to outstanding careers by the helpmate. Again, the view that "the incentive to strive very hard in the fields of science, art, or politics" (p. 92) is greatly retarded by personal wealth tends to obscure other motivating factors that operate independently of economic status

While the ideas here so ably presented by Ginsberg may well enter the teacher-education curriculum at different points in diverse programs, this volume may be very useful to many prospective teachers as they try to see the school program as related

closely with the work life of the community and nation.

For the school administrator who would pursue further the economic angles in view of his responsibilities for informing the public of the broad functions of the school in the community, the reviewer would recommend as a companion volume: J. K. Galbraith's The Affluent Society (Houghton Mifflin, 1958). Especially pertinent is Chapter XVIII, "The Theory of Social Balance," dealing with the relations of privately produced goods and services and publically rendered services. On many occasions Galbraith reinforces Ginsberg's over-all argument.

To quote the final wording of that argument: "A wise society will invest liberally in its people in order to accelerate its economic expansion and strengthen its national security. But it will also do so because in helping each citizen to realize his maximum potentialities it contributes to the well-being of all."

Libraries—public, teachers college, and school system—may well add this book to their shelves.

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PUBLICATIONS RECEIVED

Anne Anastasi. Differential Psychology. Third Edition. New York: The Macmillan Company, 1958, pp. 664.

CHARLES C. ANDERSON. Function Fluctuation. Cambridge, England: Cambridge University Press, 1958, pp. 104 (paper).

George Z. F. Bereday and Joseph A. Lauwerys. The Secondary School Curriculum: The Year Book of Education. Yonkerson-Hudson, New York: World Book Company, 1958, pp. 544.

ROALD F. CAMPBELL, JOHN E. CORBALLY, JR., AND JOHN A. RAM-SEYER. Introduction to Educational Administration. Boston: Allyn and Bacon, Inc., 1958, pp. 434.

Francis S. Chase and Harold A. Anderson, Editors. The High School in a New Era. Chicago: The University of Chicago Press, 1958, pp. 465.

Daniel R. Davies and Robert T. Livingston. You and Manage-

ment. New York: Harper & Brothers, 1958, pp. 272.

N. M. Downie. Fundamentals of Measurement: Techniques and Practices. New York: Oxford University Press, 1958, pp. 413.

Eli Ginzberg. Human Resources: The Wealth of a Nation. New

York: Simon and Schuster, 1958, pp. 183.

ELLIS FORD HARTFORD. Planning a Teaching Career. Minneapolis, Minnesota: Burgess Publishing Company, 1958, pp. 157

VAINO HEIKKINEN. Comments on the Development of Teachers-in-Training. Helsinki: Suomalainen Tideakatemia, 1957, pp. 73

VAINO HEIKKINEN. A Study in the Learning Process in the School Class Environment. Helsinki: Suomalainen Tideakatemia,

C. W. HUNNICUTT AND WILLIAM J. IVERSON, EDITORS. Research in the Three R's. New York: Harper & Brothers, 1958, pp. 446.

HEROLD C. HUNT AND PAUL R. PIERCE. The Practice of School Administration. Boston: Houghton Mifflin Company, 1958, pp.

Morris Krugman, Editor. Orthopsychiatry and the School. New York: American Orthopsychiatric Association, Inc., 1958, pp.

FRED McKinney. Counseling for Personal Adjustment in Schools and Colleges. Boston: Houghton Mifflin Company, 1958, pp. 584.

Leslie J. Nason. Academic Achievement of Gifted High School Students. Los Angeles: University of Southern California Press, 1958, pp. 92.

ROBERT W. RICHEY. Planning for Teaching. New York: McGraw-

Hill Book Company, Inc., 1958, pp. 550.

JOHN W. M. ROTHNEY. Guidance Practices and Results. New York: Harper & Brothers, 1958, pp. 542.

JOSEPH S. ROUCEK, EDITOR. Juvenile Delinquency. New York:

Philosophical Library, Inc., 1958, pp. 370.

VIRGINIA L. SENDERS. Measurement and Statistics. New York: Oxford University Press, 1958, pp. 594.

HAROLD G. SHANE AND E. T. McSwain. Evaluation and the Elementary Curriculum. Revised Edition. New York: Henry Holt and Company, 1958, pp. 436.

DOROTHY STOCK AND HERBERT A. THELEN. Emotional Dynamics and Group Culture. New York: New York University Press,

1958, pp. 296.

RUTH STRANG. Group Work in Education. New York: Harper & Brothers, 1958, pp. 322.

WILLIAM R. SUR AND CHARLES F. SCHULLER. Music Education for Teen-Agers. New York: Harper & Brothers, 1958, pp. 478.

RENATO TAGIURI AND LUIGI PETRULLO, EDITORS. Person Perception and Interpersonal Behavior. Stanford: Stanford University Press, 1958, pp. 390.

ARTHUR E. TRAXLER. Long-Range Planning for Education. Washington D. C. A. 185 ington, D. C.: American Council on Education, 1958, pp. 185

SHIRLEY ULLMAN WEDEEN. College Remedial Reader: Exercises in Standard Touthern's Standard Textbook Reading. New York: G. P. Putnam's Sons, 1958, pp. 250 (paper).

A. T. Welford. Ageing and Human Skill. New York: Oxford University Press 1979 versity Press, 1958, pp. 300.

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SMALL HIGH SCHOOLS AND THE IMPROVE-MENT OF MATHEMATICS AND SCIENCE PROGRAMS

E. PAUL TORRANCE

Bureau of Educational Research, University of Minnesota

During recent months much has been said concerning the rôle of the small American high school in the improvement of mathematics and science teaching. Many experts have said that "the small high school must go!" Whether these experts are "right or wrong," the small American high school is not likely to "fade away" instantly. Thus, it seems desirable that we examine constructively some of the problems of the small high school and try to determine what can be done to ameliorate them.

Some of the data from a larger study conducted in the spring of 1958 by the Bureau of Educational Research provides considerable information concerning the present weaknesses of small high schools in Minnesota in the teaching of mathematics and science and clues concerning the amelioration of the present condition in small high schools.

DATA COLLECTION

The data were collected by means of questionnaires sent to a 50 per cent random sample of Minnesota public high school superintendents and principals and a 25 per cent random sample of high school teachers in all fields. A few questions were asked all groups, but special questions were asked of the following groups: (a) administrators, (b) science teachers, (c) mathematics teachers, and (d) non-mathematics-science teachers. The data were analyzed when questionnaires had been received from 95 per cent of the administrators and about 90 per cent of the teachers. Included are responses from 192 principals, 165 superintendents, 239 science teachers, 236 mathematics teachers, and 906 non-mathematics-science teachers.

In this study, a small high school was defined as one reporting an enrollment of less than 200 pupils in 1957–58. Those enrolling from 200 to 499 were classified as medium schools and those enrolling 500 or more, large schools. From the small schools, responses were obtained from 73 superintendents, 57 principals, 37 science teachers, 32 mathematics teachers, and 77 non-mathematics-science teachers. Chi-square analysis was used in comparing the responses of various groups and the five per cent level of significance was chosen as the minimum acceptable level.

IS CONCERN ABOUT SMALL SCHOOLS JUSTIFIED?

One of the first questions which should be answered is whether or not the concern about the small school and its capability for conducting adequate training in mathematics and science is justified. Although the number of small high schools is sizable, the number of pupils enrolled is relatively small. This argument will be by-passed since traditionally it is the aim of American edutation to provide educational opportunity to every individual to

When the qualifications and self-reported behavior of mathematics and science teachers and of administrators of small schools are compared with those from medium and large schools, it must be concluded that there is product that there is product.

Positions Are Hard to Fill. Administrators of small high schools reported greater difficulty in filling mathematics and science positions than did those of medium and large schools (chi square for cant at less than .01 level). Twenty-eight per cent of the principals and 36 per cent of the superintendents reported that they had been matics or science, teachers in other fields or by employing unqualiting and 8 respectively.

Teachers are Younger and Less Experienced. Both mathematics and science teachers in the small and medium schools tend to be considerably younger and less experienced than those in the large schools (all differences significant at the .01 level or better). About 18 per cent of the mathematics and science teachers in the

smaller schools are less than 25 years old compared with about 5 per cent in the large schools. About 37 per cent of the science teachers and 25 per cent of the mathematics teachers in the smaller schools reported one or less years of teaching experience compared with about 10 and 8 respectively for the large schools.

Teachers Have Less Training. Mathematics and science teachers of small schools reported less training both in terms of advanced degrees and amount of training in mathematics and science than teachers of large schools. Only about 7 per cent of the science teachers and about 9 per cent of the mathematics teachers of the small and medium schools possess advanced degrees compared with 35 and 24 per cent respectively in the large schools. About 30 per cent of the science teachers of small schools reported having completed 80 or more quarter credits in mathematics and science compared with 57 per cent in the large schools. The differences among mathematics teachers of various sized schools were not statistically significant.

Teachers Spend Less Time in Keeping Up With Developments. The smaller the school the less the time devoted by teachers over a 30-day period to activities designed to keep them up-to-date with developments in science. Over 25 per cent of the teachers in large schools reported spending 32 hours or more in such activities compared with 13 and 8 per cent respectively for those in medium and small schools.

Small Schools Are Doing Less to Stimulate Interest in Science. In almost every category except field trips to observe scientists, the administrators of small high schools report fewer activities designed to stimulate interest in science than those of larger schools. The following percentages show how the responses of the principals of the different sized schools compare on a few of these activities:

- Convines.		Medium	Small
	Large	41 0001011	
	81	66	44
Career counseling in sciences	38	21	14
Local scientist on assembly program	47	44	30
Other science assembly program	17	10	2
Parent-teacher discussions	67	22	18
Science clubs	47	21	21
Science foirs	38	25	16
Awards for outstanding achievement	26	13	14
New courses in science			

Chi-square analysis indicates that size of school is a statistically significant factor in each of the above cases.

WHAT CAN THE SMALLER SCHOOLS DO?

It seems obvious from the foregoing facts that there may be just cause for alarm concerning the mathematics and science programs of small high schools, at least in Minnesota. From these facts flow a number of suggestions for improving programs in small schools. Others are derivable from other aspects of the study. Seven of these suggestions will be discussed briefly with amplifying data from the study.

They Can Improve the Competency of the Teachers They Have. Since mathematics and science teachers in small schools tend to be younger, more inexperienced, less well trained, and spend less time in keeping up with science developments, there is obviously a need to improve the competency of these teachers. Thus far, however, little seems to have happened in this regard. At the time of the study, 31 per cent of the principals of large schools compared with 14 per cent of those in small schools had taken some actions to improve the competency of science teachers. Twentytwo per cent of the large schools and 9 per cent of the small schools reported action to improve the competency of mathematics teachers. Pending actions reported, however, give a more hopeful picture. Twenty-six per cent of the small-school principals reported pending actions to improve the competency of science teachers and 19 per cent reported pending actions to improve that of mathematics teachers. In this respect, the small schools compared favorably with the large ones.

Perhaps the most discouraging indication in the in-service training picture is slowness of many science teachers in small schools to formulate plans for improving their competence. Thirtyeight per cent of the science teachers of small schools reported no plans for improving their competence compared with 25 per cent in large schools. Science teachers in small schools lagged in every category of self improvement: independent reading and study, summer study at a university, work on syllabi, participation in a summer institute or workshop, and the like.

Considerably more encouraging, however, is the attitude of science teachers in small schools to some of the suggested methods

of improving teacher competence. Most strongly recommended was "courses to bring science teachers up-to-date," with 87 per cent voting approval. This exceeded both the percentage of teachers in large schools and principals and superintendents of small schools approving this measure. Science teachers in small schools also expressed greater enthusiasm than those in large schools for state-wide testing and counseling programs and strategically located centers for assisting science teachers. Sixty per cent in the small schools compared with 40 per cent in the large schools approved the testing and counseling programs and 49 per cent in the small schools and 29 per cent in the large schools saw value in the centers for helping science teachers. Although the principals of small schools tended to be more enthusiastic than those of large schools about traveling science libraries, science teachers in small schools tended to be less enthusiastic about this measure than those in large schools.

Although science teachers in small schools seem somewhat slow in taking initiative to improve their competence, their general attitudes concerning provisions for improving competencies of science teachers appear healthy. It seems quite likely that they would respond favorably to leadership in this direction. University courses to bring science teachers up-to-date, statewide testing and counseling programs, summer work in science laboratories, and strategically located centers for working with science teachers

would appear to be the most promising alternatives.

They Can Offer More Courses in Mathematics and Science. Most of the small high schools in the sample studied could offer more courses in mathematics and science by assigning present teachers a full load in these fields instead of requiring them to teach courses in other fields. This might mean, of course, that an additional teacher would have to be employed in some other field.

Only 30 per cent of the science teachers in small high schools reported teaching as many as five courses in mathematics and science compared with 68 per cent in the large schools. Over 50 per cent of the science teachers in small schools taught three or less courses in mathematics and/or science. Similar reports were obtained from mathematics teachers. In small high schools, only about 15 per cent taught five or more classes in mathematics and science compared with 55 per cent in large schools. About 60 per cent of the mathematics teachers in small schools taught three or less courses in mathematics and/or science.

In addition to enabling the school to offer a stronger program in science and mathematics, this proposal would probably permit mathematics and science teachers to devote more time to increasing their competencies in these fields. They would not have to divide

their preparation time between such diverse fields.

They Could Pay Mathematics and Science Teachers for Special Services. Although teachers and administrators in general expressed strong disapproval of differential pay for mathematics and science teachers, the proposition was more favorably viewed by teachers and administrators of small schools than of large schools. This was true of superintendents, principals, science teachers, mathematics teachers, and non-mathematics-science teachers. This would suggest that some type of special pay schedule might successfully be adopted in small high schools. The additional pay might have to be for special training, special services, or the like. It seems likely that some modified program intelligently administered would meet relatively little resistance.

They Can Improve Their Science Library and Laboratory Resources. Superintendents, principals, and science teachers of small schools all consider their science laboratory and library resources more inadequate than do their counterparts in larger schools. In the small schools, 75 per cent of the principals, 81 per cent of the superintendents, and 73 per cent of the teachers consider the science laboratory resources inadequate to some degree. Fifty-nine per cent of the principals, 62 per cent of the superintendents, and 68 per cent of the teachers regard the science laboratory equipment inadequate to some degree.

An interesting point here is that many of the administrators Apparently what is were available for improving these resources. Apparently what is needed is initiative and planning on the part of the science teachers to requisition the books or the equipment needed, or leadership on the part of the administrator in stimulating such initiative and planning. Some administrators even complained that teachers would not spend the funds available. Many admitted, however, that these funds were not budgeted specifically for science equipment and books. This might indicate

a need for staff planning in the expenditure of funds from a general

budget.

They Can Guide Teachers in Planning Self-Improvement. As already shown, science teachers in small schools lag in making plans for improving their competency and spend less time in improving their competencies than do their counterparts in the larger schools. This would suggest that science teachers in small schools need guidance from superintendents and principals in planning for self-improvement. This seems important for at least three reasons. First, science teachers in small schools tend to be young, inexperienced, and lacking in advanced training. Second, these young and inexperienced teachers are less likely to have expert, experienced science and mathematics teachers available for counsel. Thus, the administrator is perhaps the most likely to be in a position to provide this leadership. Third, the small number of science and mathematics teachers in a small high school makes it unlikely that in-service training programs within the school will provide solutions to the problem.

They Can Provide for Students Gifted in the Sciences. Although only 21 per cent of the principals of small schools compared with 71 per cent of the principals of large schools reported special provisions for students gifted in the sciences, some provision can be made for such students in small schools. In the small school, these special provisions might have to take a different form. It might be through acceleration, enrichment, or independent study rather than through special sections. Since classes are likely to be smaller, this might be more practicable than in the larger

schools.

They Can Be Provided Special Aids. Administrators and science teachers are, if anything, less enthusiastic about "assistance and materials" from the state department of education than their counterparts in large schools. There are, however, special aids Which small schools are likely to welcome. For example, about 60 per cent of the science teachers and almost half of the administrators of small high schools favor a statewide testing and counseling program. The response from larger schools was less enthusiastic; many of them already have adequate programs of testing and counseling. A testing and counseling program designed specially for the needs of small high schools would likely elicit even greater approval than was registered in this study.

actually exists among his students. Nevertheless, I do not wish to give a misleading impression. Under certain conditions this constraint concerning normality can be relaxed. The marking system innovation to be described will also be applicable if the distribution of IQ's is skewed to the left for, if negative skewness prevails, we have no single individual whose ability is too far and away above that of his fellows. The procedure to be described is inadequate if one or more members of the classroom group possess intellectual ability too far above the rest of the group. Precisely what degree of positive skewness would make the procedure to be described, inadequate, still remains to be determined. However, it should be reemphasized that the positive skewness of which we are speaking refers to intellectual capacity (IQ) and not to the distribution of scores on any test which is used as a measure of educational performance in the classroom.

A second assumption involved in the application of the procedures to be described, is that objective type tests are being used in the classroom and that these examinations test for content only, never relying on a play of words to trick students. It is about time that this type of educational game and relationship between teacher and pupil disappear from the educational scene. The final assumption which must be made is that the material of the examination representatively covers both textbook and lecture assignments and that, wherever possible, test questions and problems are framed so as to determine understanding in addition to mem-

PROCEDURES

I should now like to describe the procedures, themselves, for the reader. There are three of these involved.

Procedure 1. This procedure is used only when the distribution

of test scores is negatively skewed. The class is told that if test scores are bunched up at the right end of their distribution of scores, the following procedure will be employed. The pace-setter's mark, that is, the mark of the highest scorer, will first be defollows All tost and is done letter-grades will be distributed as follows. All testees who obtain a score of 90 per cent or better of the pace-setter's score, will receive an A. Those who receive a score which is equal to 80 per cent of the pace-setter's score of better but which is larger of the pace-setter's score of the pace-setter's score. better but which is less than 90 per cent of the pace-setting score,

will receive a B. In the same way the remainder of the marks are furnished by the following criteria: C-70 per cent of the pacesetting score or better but less than 80 per cent of that score; D-60 per cent of the pace-setting score or better but less than 70 per cent of that score and F-any score which is less than 60 per cent

of the pace-setting score.

Procedure 2. This procedure is used only when the distribution of test scores is positively skewed. The class is told that if test scores are bunched up at the left end of their distribution, the following procedure will be employed. The pace-setter's score will be determined and the mark of the lowest scoring individual on the examination in question, will also be ascertained. The range given by the distribution of the difference between these two scores will be split exactly five ways and the letter-grades from A through F, inclusive, will be distributed from the highest to the lowest fifth, respectively.

It is then made clear to the class that these procedures explain the origin of any single letter-grade for an examination. It is further explained, however, that inasmuch as several examinations will be given during the course of the semester, there will be several letter-grades to combine into a final mark. The procedure

for doing this is explained as follows:

Procedure 3. For each A on an examination, 4 points will be given, for each B, 3 points, for each C, 2 points, for each D, 1 point and for each F, 0 points. Let us assume that N examinations have been given during the semester. Then each student's examination points are totaled for the N examinations. The maximum possible range of points under these conditions can then run from 0 to 4N points. Since we wish to obtain five, final letter-grades, we divide this maximum range by 5. This will yield 5 intervals each of length, 4N/5. Each of these intervals determines one of our final grades. Thus, for instance, if an instructor had given 5 examinations, the maximum number of possible, total points would be 20. Dividing this by 5 means that each letter-grade interval has a range of 4 points. This would yield 5 letter-grade distributions, as follows: A: 17-20, B: 13-16, C: 9-12, D: 5-8 and F: 0-4.

The rationale for the first two procedures is explained as follows to students. First, these procedures are meant to prevent the instructor's likes and dislikes for different types of students from subjectively influencing the marking procedure. Second, it is pointed out to students that they set their own marks by competing with each other through attention, effort and interest. Third, no demand is being made that any fixed percentage of the test material must be learned in order to receive a passing grade or even a good grade. On the basis of either of the first two procedures, there will be A's and B's who have learned less than 50 per cent of the material on which the class has been tested. It is pointed out, however, that if there are a few highly motivated individuals in the group, it will be dangerous to be an educational slacker, for pace-setters can tumble slackers into the D and F cellars. It is then emphasized that for grade purposes alone, if no other, students who wish to preserve a good transcript of record and do themselves justice, had best keep on their toes, precisely because, whether they do or not, the pace-setters will.

Finally it is explained to the class that if the final results seem to be too low in terms of the known general abilities of the students, the instructor may exercise the following option. He may, before assigning final letter-grades, give one or two bonus points across the board to all students. This has the effect of improving some but not all marks. The exercise of this option will improve the position only of those students who, prior to its use, were one point below the floor for the next letter-grade. The present writer has not had to exercise this option too frequently. However, when he does invoke it, it is because its exercise tends to yield a distribution of scores which appear to be more normal, from inspection, than the pre-option distribution of scores.

It is amazing what strong motivation a marking procedure of this sort, introduces into the classroom. Without any accompany ing tension students tend to make sure that they understand textbook and lecture material by asking detailed and thoughtful questions. Every effort is made to understand rather than to memorize. The diligence and application subsequently shown under this marking procedure, has resulted at times in a class obtaining a large percentage of A's and B's, combined. Inasmuch as the author has felt that, in such cases, the grades were deserved and inasmuch as he does not believe in a wooden and uncritical use of the bell curve for grading purposes, he is inclined to think of such results as favorable evidence that motivation was successfully initiated. He is doubly convinced of this because of the fact that on several occasions, when a large percentage of A's and B's were

obtained, the pace-setters obtained scores which varied anywhere from 86-91 per cent of the maximum possible score. Anyone who has seen a class come up from a test distribution of grades which were largely F, D and C to subsequent distributions which were largely A, B and C, will realize how extensively the procedures outlined in this paper will promote careful study and learning. Generally the initially bad results are due to student inexperience with the new system. Once they obtain a feel for it and an understanding of the consequences it is likely to promote, they tend to stay on their toes for the rest of the semester. In short the effect of this innovation in marking is to curtail the variation in achievement as expressed by the SD of obtained test scores. We know that individual differences in ability tend to increase the variability in achievement under the usual conditions of motivation in learning. However, under the system described here the heightened motivation it induces, appears to constrict variation in achievement, in the sense that a superior performance is turned in by an unusually large percentage of the learners.

I now wish to describe a simple experiment which substantiates statistically the claim made earlier that motivation under these marking procedures results in better performance than the motivation which is present when students' grades are distributed on a bell-shaped curve. Table I presents the results in test performance obtained for pairs of groups taking the identical test but varying in treatment. One of the groups in the pair was subject to the marking procedure described here. The other was subject to a marking system based upon the normal distribution. In using the normal distribution, letter-grades were distributed as follows: A—normal distribution, letter-grades were distributed as follows: A—7%. B—25%, C—36%, D—25% and E—7%. This experimental plan just mentioned was applied to two different courses taught

TABLE I.—MEDIAN SCORE POINTS FOR EACH LETTER-GRADE UNDER BOTH

	EXPERIM	ENTAL AND C	ON THOSE OF					
		Median Scores for Letter-Grade Group						
Subject Group		В	С	D	E			
$\begin{array}{c} B_1 \\ P_1 \\ B_2 \\ P_2 \end{array}$	76 97 82 103	64 86 74 91	52 75 59 81	37 66 52 69	26 41 36 42			

by the present author. Let us refer to one of these courses as C1 and to the other as C2. We shall designate the group which received the normalizing treatment under C_1 , as B_1 , and the group which received the pace-setting treatment under C1 as P1. In an analogous manner we define B_2 and P_2 . The size of the groups is given at this point. $B_1 = 32$, $P_1 = 29$, $B_2 = 23$ and $P_2 = 27$. The maximum number of score points possible on the test for C1 was 150 and for C2, 160. The median scores obtained by all subjects who received each of the five letter-grades in both the experimental and control groups for both C_1 and C_2 , are shown in Table I. It is clear from Table I that for both C1 and C2 a definite difference in performance trend exists between the pace-setting and normalizing procedures, in favor of the pace-setting procedures.

However, a difference in trend is not sufficient to satisfy the claims which have already been made on behalf of the pace-setting procedure. We therefore decided to run a t-test between the rounded-out, average scores of $B_1 = 54$ and $P_1 = 78$ and between $B_2 = 62$ and $P_2 = 85$. On the assumption that all four groups appeared to be normal by inspection, t was computed. The achievement differences then found, both between B₁ and P₁ and between B₂ and P₂, were significant at better than the one per cent level. This leaves little doubt that the marking system described here results in better test performance and motivation than the traditional one based upon the bell-shaped curve.

The author feels that educational administrators and supervisors would do well to inaugurate the marking system described here, on a larger experimental scale. It would be of value if we could obtain more extensive confirmation that increased motivation and learning may be aided and abetted by a grading inno-

vation of the type discussed here.

SHALL SOVIET PRACTICES GOVERN CHANGES IN AMERICAN SCHOOLS?

GAITHER McCONNELL

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Are children in the USSR receiving a better education than children in the U.S.A.? Are Soviet schools superior to ours? Is a 10-year intensive program better than our present 12-year one? Should all students in schools in the U.S.A. receive more training in mathematics and science? Do we need longer school hours, more homework, tougher courses, sterner discipline in our schools? Shall we de-emphasize sports and athletics and eliminate extra-curricular activities?

Suggestions have been made for incorporating what are considered the more desirable features of Soviet education into our schools. The relative merits of the practices of two systems of education cannot be appraised without a total view of the systems and the relation of each to the society that it serves. An examination of the philosophy, aims, scope, organization and content of any educational system is necessary before one can evaluate its methods and achievements.

During visits to schools and conferences and discussions with leading Soviet educators as part of a recent five-week study of education in the USSR, I obtained first hand information concerning many aspects of education in the Soviet Union today. The information that impressed me most forcefully is that Soviet education is at present undergoing radical changes as a result of putcation is at present universal education. Many of the features ting into effect 10-year universal education. Many of the features of their system highly praised by Americans are being changed, either because the Soviets are not pleased with them, or because either because the Soviets are not pleased with them, or because they do not find them feasible for their rapidly expanding economy and school system.

¹ Dr. Gaither McConnell has recently returned from a five-week study of the Soviet school system. She was a member of The Comparative Education the Soviet school system. She was a member of The Comparative Education the Education in the U.S.S.R. during August-September, 1958. She Field Study in Education in the U.S.S.R. during August-September, 1958. She visited many types of educational institutions in Moscow, Kiev, Leningrad, visited many types of educational institutions in Moscow, Kiev, Leningrad, visited many types of educational institutions and talked with students, teachers, and Tashkent. She observed in classrooms and talked with students, teachers, and key people in Soviet educational agencies as well as with plain citizens.

The seriousness and enthusiasm with which education is regarded by all people in the Soviet Union and the importance which Soviet society attaches to education impresses all visitors to the USSR. These attitudes can, I think, be attributed chiefly to two things. First, and we were reminded of this by many Soviet people, education has been made available to the masses of people only within the past forty years. Before 1919 illiteracy predominated throughout the vast territories now consolidated into the USSR and gradually has been eliminated. It is only now that an effort is being made to extend 10-year education to smaller cities and villages.

Education is still considered a privilege. It is almost the only means by which a person can advance to higher levels in Soviet life where intellectual and practical achievement are so highly es-

Second, education is looked upon by the Central Committee of the Communist Party as a necessary means of fulfilling their economic and technical needs at home and extending their influence to other countries. The Soviet state allocates a large share of the national resources to education. All aspects of the schools and other educational agencies receive the closest attention from people in authority in Soviet affairs.

"Education" in the Soviet Union is not limited to schools, but includes all of the agencies involved in forming and shaping the thinking of children, youth, and adults. This involves the political and cultural aspects of all organizations concerned.

The aim of Soviet education is to build an ideal society, to change human nature in line with the demands of Communism, and to form the political and world outlook of the "new Soviet man." The enlightenment of people and the development of the abilities of the individual are not some and the development of the abilities of the individual are not primary aims of Soviet education. Mastery of knowledge is acquired along with the instilling in consciousness of the Communist ideology and indoctrination in the Marxist-Leninist teachings regarding the nature of the universe and the laws of social development.

We were told that Marxism-Leninism is the basis of Soviet pedagogy and that Soviet psychology is a dialectical psychology resting on the foundation of Marxism-Leninism. The theory of Soviet psychologists in the control of Marxism-Leninism. Soviet psychologists is that of Pavlov—a theory of conditioning. They believe that there is no foundation in inherited or innate giftedness.

Matter is regarded as the source of all existence. The external world, the fundamental reality, is material in its nature and was created by no one. Mind is the highest product of matter.

The theory held to is that every school subject must contribute to the development of a materialistic conception of the phenomena of nature, social life, and the mind of man. The emphasis in the Soviet curriculum on mathematics, on all of the natural sciences, and on history is readily understood—they have great ideological value.

The entire educational process in the Soviet Union is centrally controlled under the leadership of the Communist Party. The Soviet school system consists of schools providing general education for everyone, either 7-year or 10-year schools, and schools providing professional education for a planned number of pupils selected on a highly competitive basis.

The same curriculum is followed by all students in 7-year and 10-year schools. There are no electives and no special classes.

All higher education is professional or sub-professional and provides specialized training. Its purpose is to provide professionally

competent people to serve the needs of the state.

In 1955–56 the Soviets started work in some experimental schools on their new curriculum, required by the transition to universal secondary education and polytechnical training. What changes are taking place in Soviet education as the Soviet economy and school system expand? What is happening as 10-year education becomes universal and the upper grades of the secondary school are no longer composed of only the highly selected students that they have had in the past?

We were told that there have been changes in educational theory as a result of the purported ten years of school for all pupils. Previously education was aimed at preparation for entrance examinations to higher education institutions, but now the aim is at a prac-

tical application to work.

The former aim was to give study habits for future study, but now that the aim is to improve life and work, the application of knowledge is of greatest concern. Education is not now adjusted to examinations, but to habits, ways to use books, continuation of education through self education.

The plan is to increase the number of years of school to 11 or 12 years, but students in the upper classes will have both theoretical

and practical education combined.

Instead of 7-year, now 8-year compulsory education has been proposed. Then after 8 years of studying (the plan is to construct many different special schools-3-year, 4-year schools closely connected with production), 10-year universal education will be completed in special schools, and at the same time training in industries will be given-industries required by the Soviet economy.

The Soviets have in view complete secondary education for everyone. Since not all pupils will continue their education and enter a university—some may go to work—the schools already giving high theoretical preparation for students must also take the function of the preparation of young industrial and agricultural workers as well. The economic position of the Soviet Union, we were told, has reached such levels in the past years that workers in plants need more qualifications. There is a need for more workers with a complete 10-year education, but they also need high polytechnical education.

Boarding schools are a new feature of the Soviet education system. They have existed since 1956 as a result of the decision of the Twentieth Congress of the Communist Party and will soon be widespread, we were told. There are now only about 500 in the USSR and only 24 in Moscow. Children are admitted to boarding schools only if their parents wish it.

In response to some of our questions about boarding schools, it was explained that there is no intention of replacing regular schools with them. They are not for selected children, but for children whose parents cannot give them the proper influence every day. There will be as many such schools as are necessary to help part of the population.

There has been a change in the admission policy to universities. This is in line with the emphasis on polytechnical education and the desire to connect theoretical and practical knowledge.

The University of Moscow, which has an enrollment of more than 24,000 students, in September, 1958, had 8000 applicants for the 2800 vacancies, in September, 1958, had 8000 applicants for the 2800 vacancies in the student body. Of the vacancies, 80 per cent are reserved for cent are reserved for young people with at least two years work experience in enterprises and those who have been demobilized from the Soviet A reason of t from the Soviet Army. Only 20 per cent of the vacancies are for graduates just out of the 10-year schools. Most of the students in this group who are accepted are the honor or "gold medal" students. All students, in both groups, must have high school certificates and must pass the five entrance examinations with a mark of "5" in each—the mark of excellent—or no less than three 5's and two 4's.

One reason, it was explained, for extending the 10-year school to 12 years—in addition to providing time for polytechnical training-is that parents and teachers have complained about the tension of children, they become over-tired. They have said that boys and girls don't have time for enjoyment and amusement after preparing their home tasks.

Some experimental work in the field of didactics is being carried

on. Some of the questions being investigated are:

(1) Is it necessary to question each student at every lesson, or to have discussion with students after each topic has been studied?

(2) Is it possible to give students no homework? Can material be mastered in class? What method should be used?

(3) What material can be memorized in class with no prepara-

tion? What should the method be?

The aim is to find ways to give all students equal or nearly equal knowledge. The "group" in the classroom suggests ways of having a student improve his work, his marks. If there are children in the group who do exceptionally good work, the group finds what their methods of study are and tries to get the rest of the group to follow

In reference to discipline or moral education, it was said that them. when an individual is "naughty" the "collective body" (the group) begins working on him and makes him disciplined and respectful.

We observed that social pressure is exerted constantly from all directions to keep children and adults in approved behavior patterns. Corporal punishment in any form, either in the home or in the school, is prohibited. Rewards and punishments to be used in the Soviet school are set by the ministries of education. Consistency in the requirements of the school and of the family are regarded as essential. The school works closely with parents.

Great emphasis is placed on physical culture, sports, and aesthetic education. Extra-curricular work in connection with or related to the work in the regular classroom is conducted by "amateur circles" or clubs. Almost all students at all levels participate

in these activities.

The Central Committee of the Communist Party of the Soviet Union in whose hands rests the control of the Soviet system of education has, it seems at present, developed an educational system consistent with their philosophy and well suited to fulfilling their aim—the preparation of a generation of "new Soviet men and women" capable of firmly establishing Communism. Any changes in the Soviet system are apparently based on the stated philosophy of Marxism-Leninism.

As for suggestions that our system of education should be altered in the direction of the Soviet system, and some of their features be adopted, my observations of the Soviet educational system lead me to this conclusion:

The American system of education does need changing to meet the requirements of our developing economy. Practices based on a philosophy so diametrically opposed to our emphasis on the value of the individual should be rejected. Effort, enthusiasm, and support should be turned towards the initiation and development of practices suited to the philosophy and aims of our democratic way of life and of our free society.

EXPERIENCED TEACHERS VIEW THEIR SCHOOLS

EMMA REINHARDT and ELIZABETH K. LAWSON

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In November, 1956, the writers undertook an opinion survey designed to ascertain whether or not experienced teachers are satisfied with their working conditions. Opinionaires were sent to 2,698 Illinois members of Delta Kappa Gamma, professional international society for women teachers. Unemployed and retired teachers did not fill out the opinionaire.

Replies were received from 1,205 members. They represent 52 chapters of the organization with members in every county of the state.

The first part of the opinionaire called for personal data: number of teachers in the school system, salary, marital status, type of position held, number of years of teaching experience, and number of years in the present school system.

Respondents taught in systems ranging in size from those employing fewer than 25 teachers to those employing over 17,000 teachers. Schools with fewer than 100 teachers accounted for 45.9 per cent of the group; schools with 100 to 500, 33.7 per cent; schools with 500 to 1,000, 3.7 per cent; and schools with 1,000 and above. 16.7 per cent.

Salaries ranged from \$2,200 per year to \$10,750 with a median of \$5,202. This median points up the fact that top salaries for teachers are far too low. For this seasoned group the median salary was scarcely more than one thousand dollars above the

median salary for beginners in Illinois in 1956-1957.

Sixty-three per cent of the teachers were single, twenty-eight per cent were married, and nine per cent were widows. That the percentage of single teachers in this group is above the national average for teachers may be due to the fact that most of the respondents began their careers in a day when school boards regarded marriage as cause for terminating teaching contracts, and thus only single teachers remained.

Diverse types of positions were represented. Elementary classroom teachers constituted the largest group (41.0 per cent); secondary classroom teachers were second with 29.0 per cent; prin-

cipals and supervisors were third with 15 per cent.

Since one of the requirements for membership in Delta Kappa Gamma is five years of teaching experience, no one in the group had less than this number. Years of experience ranged from five to more than twenty-five years. One is struck by the fact 60 per cent of the group had taught from twenty to twenty-five years; 14 per cent from fifteen to twenty years; 9 per cent from ten to fifteen years; and 2 per cent from five to ten years. Obviously this was a mature group with adequate background for evaluating their working conditions.

As might be expected for a mature group, many of the teachers had been in their present position for a long time. Nearly one third of the group (32.0 per cent) reported a tenure of twenty-five years or over. Only 9 per cent had been in their present position

less than five years.

The second part of the opinionaire consisted of twenty statements designed to ascertain whether or not the respondents considered their school system an excellent one in which to teach.

Directions for checking the statements follow:

"These statements are intended to gain information concerning teachers' satisfaction or dissatisfaction with their working conditions. In the long run such information has a bearing upon problems of teacher recruitment. We are interested in the combined opinions of Delta Kappa Gamma members in Illinois. DO NOT SIGN YOUR NAME. We want YOUR opinion, not that of your friends. PLEASE DO NOT DISCUSS THE STATE-MENTS WITH OTHERS BEFORE RECORDING YOUR ANSWERS. For each statement check the column that most nearly expresses your opinion."

A summary of findings is given in Table I.

It will be noted from Table I that every item but Number 14, "There is satisfactory provision for supervisory services," was checked "There is not represented the satisfactory provision for supervisory services," was checked "True" by more than one half of the group, while ten items were checked "True" by at least three fourths of the

The six statements highest in frequency of mention as "True" were: (1) The teacher's personal life is not subject to unjust supervision. (92.3 per cent) (2) Job security is high. (91.4 per cent) (3) There is not subject to the cent. cent) (3) There is academic freedom. (89.3 per cent) (4) There

TABLE I.—OPINIONS CONCERNING TWENTY STATEMENTS

Statement		False	Doubtful	No reply	Total
1. School buildings are in good con-	77.1%	5.9%	17.0%	0. %	100%
dition and well maintained.					100
The salary is equal to (or better than) that in comparable school	68.3	11.8	18.7	1.2	100
systems in this area.	71.8	11.2	16.6	.4	100
3. The teaching load is reasonable.	91.4	1.3	7.3	0.	100
4. Job security is high.	62.7	5.9	31.0	.4	100
5 Promotions are made fairly.	74.9	5.2	19.2	.7	100
6. Good professional relations exist among school board, adminis-	14.9	5.2	10.2		
trators, and teachers.	89.3	2.3	8.4	0.	100
7. There is academic freedom.	76.0	3.3	19.8	.9	100
8. Support is given the teachers by					
the community. 9. Teachers are free to participate	70.5	5.1	24.4	0.	100
in political activities. O. The load of extra-class assign-	69.7	8.7	20.8	.8	100
ments is reasonable. 1. There are adequate provisions	87.4	3.3	8.6	.7	100
for sick leave. 2. There are satisfactory provisions	58.3	17.3	23.7	.7	100
sam leaves of sheence.	87.4	2.0	8.1	2.5	100
3. Teachers are friendly and helpful	46.5	19.4	33.6	.5	100
4 Thoro is satisfactory Provision	20.0				
for supervisory services. 5. There are adequate teaching aids	73.3	9.1	17.6	0.	100
(such as library resource,	92.3	2.2	5.5	0.	100
audio-visuar aids, 6607, 660. The teacher's personal life is not subject to unjust supervision. 7. Adequate "grievance machinery". 17. Like for teachers who	50.1	13.3	35.4	1.2	100
		10.7	28.9	.7	100
wish to present growth. 8. Teachers have a share in formu-	56.7	13.7	20.0		
lation of policies.	87.4	3.7	7.7	1.2	100
lation of poncies. 19. Continued study is encouraged but not demanded unjustly.	53.6	18.9	27.5	0.	100
but not demanded up. 20. Teachers have opportunity to become acquainted with the school board and to see it in operation.					

are adequate provisions for sick leave. (87.4 per cent) (5) Teachers are friendly and helpful. (87.4 per cent) (6) Continued study is encouraged but not demanded unjustly. (87.4 per cent)

The extent to which years of experience influenced respondents in checking certain statements as "True" is a matter of conjecture. It seems possible that five of the six statements leading in frequency as "True" might be viewed differently by experienced and relatively inexperienced teachers. Teachers long employed in the same community obviously enjoy job security. Their long tenure probably indicates that they possess sufficient artistry in human relations to win the confidence of the community. Presumably they have earned a reputation for appropriate conduct and good judgment so that they encounter little or no interference either in personal or professional matters. Their skill in human relations may well involve the art of manifesting friendliness and their own attitude may evoke similar response from colleagues. Since many teachers complete their formal professional training early in their careers, they escape pressures for continued study in their later years and thus may not be keenly aware of such de-

It will also be noted from Table I that no item was checked "False" by as many as one fifth of the group. The six items that led in frequency of mention as false were: (1) There is satisfactory provision for supervisory services. (19.4 per cent) (2) Teachers have opportunity to become acquainted with the school board and to see it in action. (18.9 per cent) (3) There are satisfactory provisions for leaves of absence. (17.3 per cent) (4) (5) Adequate "grievance machinery" is available for teachers who wish to present grievances. (13.3 per cent) (6) The salary this area. (11.8 per cent)

It will be further noted that six items were checked "Doubtful" by nearly one third of the group. The six items that led in frequency of mention as doubtful were: (1) Adequate "grievance machinery" is available for teachers who wish to present grievances. (35.4 per cent) (2) There is satisfactory provision for supervisory services. (33.6 per cent) (3) Promotions are made fairly. (31.0 per cent) (4) Teachers have a share in formulation of policies. (28.9 per cent) (5) Teachers have opportunity to be-

come acquainted with the school board and to see it in operation. (27.5 per cent) (6) Teachers are free to participate in political activities. (24.4 per cent)

Possibly the points of dissatisfaction are best revealed by combining the frequency of responses for items checked "False" and "Doubtful." The six items that led in frequency of mention when "False" and "Doubtful" responses were combined follow: (1) There is satisfactory provision for supervisory services. (53.0 per cent) (2) Adequate "grievance machinery" is available for teachers who wish to present grievances. (48.7 per cent) (3) Teachers have opportunity to become acquainted with the school board and to see it in operation. (46.4 per cent) (4) Teachers have a share in formulation of policies. (42.6 per cent) (5) There are satisfactory provisions for leaves of absence. (41.0 per cent) (6) Promotions are made fairly. (36.9 per cent)

Again, as was pointed out in the case of the items marked "True," the factor of experience may affect the teachers' responses. Indeed, not only experience but a number of other factors probably influenced the replies. However, the fact that the answers are intended frankly to reflect personal opinions does not mean that they lack significance. Quite the contrary. The things that we consider true are, as social psychologists remind us, true for us and have important consequences. If teachers feel marked dissatisfaction with a given situation, the grievance is real for them and deserves examination.

Whether or not conditions in certain school systems are desirable or undesirable does not show up when only totals are considered. It was found in tabulating replies that many teachers checked all or nearly all items as "True" while others checked all or nearly all items as "False" and/or "Doubtful."

A number of teachers added comments to clarify their opinions. Several pointed out that schools were "terrifically overcrowded," that their teaching load was extremely heavy and that such tasks that their teaching load was extremely heavy and that such tasks as keeping records, collecting money for various purposes, such as as keeping records, collecting money for various purposes, such as hot lunches and innumerable drives, attending committee meethot lunches and innumerable drives, attending committee meethots, and supervising lunch rooms, were very burdensome. Some mentioned frustrations arising from the fact some pupil was always out of class for such activities as band, orchestra, patrol always out of class for such activities as band, orchestra, patrol duties, and basketball. Some thought that promotions often went unfairly to men, simply on the basis of sex rather than on merit.

Similarly, several observed that although men received higher salaries than women, men were favored with a lighter load of extra-class assignments.

By no means all of the comments were unfavorable. For example, a single woman who had taught twenty-five years or more, with less than five of them in her present position in a school system with eighty-seven teachers, checked all statements "True" and elaborated as follows: "We take turns sitting in on interviews with candidates for positions. Thus we aid administrators and board members in selection of new teachers. We have a curriculum director, three art supervisors, who teach as well as counsel, and two P. E. counselors and teachers. Teaching load is kept at a maximum of twenty-five. All policies are made by board members, administrators, and teachers. Staff meetings are held each Thursday afternoon following a two-thirty dismissal. They are used for such purposes as formulating policies and carrying on various kinds of committee work. The salary schedule is based on three levels-probationary, professional, and career-with yearly increments of one to two increments of \$150."

As far as this group of teachers was concerned, most of the things that they regarded as unfavorable about their school systems could not be attributed primarily to lack of money. Aside possibly from providing satisfactory supervisory services and leaves of absence, the other items that ranked high on the combined "False" and "Doubtful" list could be corrected without

increased financial outlay.

Although the various sources of dissatisfaction do not fall into any clear-cut categories, they seem basically to represent failures in human relations. Perhaps many administrators do not realize the importance of building up esprit de corps by giving teachers a real share in policy making. Teachers resent being regarded as mere cogs in a machine. They want to have a genuine stake in matters affecting their schools. Increased emphasis on personnel relations would pay high dividends in effective work and improved

SCOPE, TRENDS, AND PROBLEMS OF CORE CURRICULUM WORK IN ALABAMA

OTTO HOLLAWAY

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The National Commission on Core Teaching is a sub-division of the National Association for Supervision and Curriculum Development of the NEA. This commission consists of people from various parts of the United States and Canada who are vitally interested in improving education through more effective problemsolving procedures. The Commission accepted the responsibility of trying to determine the extent and nature of core curriculum offerings in various parts of the country as well as determining the trends and problems encountered in such endeavors. The Commission urged a nation-wide sampling study which was done by Mrs. Grace Wright of the U.S. Office of Education, a member of the Commission, the results of which are available in a publication, "Block-Time Classes and the Core Program in the Junior High School". The writer, as a member of this National Commission, has assumed the responsibility of making a more extensive and thorough study in Alabama with the hope that such findings may point the direction for more effective teacher education and more effective patterns of school organization and curriculum design. The summary results of this study will be set forth in this article.

Philosophy Supporting the Core. A brief discussion of the writer's philosophy supporting this study should probably be presented at this point. The core curriculum is a problem-centered or problem-solving conception of education which is in keeping with the demands that a democratic, highly-specialized, industrialized, urbanized, inter-dependent society exacts of its people. Or it is the avenue through which all outstanding progress of the past several decades has been made in the many fields of endeavor. For example, all outstanding progress in fields such as medicine, engineering, architecture, mathematics, agriculture, business, transportation, communication, etc., has resulted from the application of the scientific method, or the problem-solving procedure. All these fields of endeavor pay a high premium; society in turn benefits tremendously if people are capable of doing efficient scientific problem solving and can help solve life problems. Therefore, since life expects people to deal with problems efficiently, it is the responsibility of the school to educate people to become efficient problem solvers.

There is only one effective way of helping people to become efficient problem-solvers: provide them with first-hand experiences in scientific problem solving. It therefore becomes the duty of the school to build its curriculum around the problems of living, individual and social, and to direct its pupils in dealing with such problems through meaningful, purposeful, learning experiences. When such a program is in operation, pupils become proficient in identifying and selecting real-life problems; they learn to define such problems in terms of all the people affected by them. After they have identified and selected it according to the criteria, the students next step is to project hypotheses that offer promise for the solution of the problem at hand. Then they check these hypotheses against available information and select the one that gives the best promise of success. Next they collect additional information and carry on research and experiments as means of validating this hypothesis. If the hypothesis is validated, the students draw conclusions, generalizations, and recommendations, after which they apply their conclusions to the actual solution of the problem. In case the hypothesis is not validated, they follow certain alternate procedures. They may experiment and research further to be sure that they have explored all pertinent information before they discard that hypothesis. If they find this line of procedure unpromising, they may project a second hypothesis and, in turn, proceed to prove or disprove its validity. This procedure is adapted to the maturity level of the boys and girls concerned. Through such learning procedures pupils become increasingly proficient in problem-solving procedures and capable of coping with problems of increasing difficulty and significance.

This concept of education offers the greatest possibility for the maximum development of each individual in keeping with his interests, needs, and abilities: it provides opportunities for a large range and variety of learning experiences of sufficient scope to challenge the most gifted child; at the same time it provides the average and less gifted with opportunities for success and achievement by which they gain status, recognition, and acceptance so

vital to the emotional stability and social adjustment of any person. It also provides rich opportunities for the use of various media of self-expression, another effective way of taking care of individual differences. Some students can express themselves more effectively through verbalizing procedures; others express the same understandings more effectively through designing, modeling, painting, sculpturing, acting and singing.

The core curriculum concept of education holds to the viewpoint that learning results in changed behavior. Therefore, we express our objectives in terms of changing behavior rather than in terms of acquisition of facts, knowledge, and understanding. Facts, knowledge, and understanding are of no lesser importance than in more traditional programs, but the emphasis on them has been drastically changed. They become means to an end, rather than ends in themselves. This is saying that skills are very vital and necessary in dealing with life situations and life problems, but since they are means to an end the learning of such basic skills is much more purposeful and real. Drill is also essential in such endeavors, but drill is no longer pursued in routine form but grows out of diagnostic learning situations where specific weaknesses and needs are discovered. Each pupil drills to acquire the skills he needs, in amount as his learning-rate and his need requires.

The core is also based on the theory that a person learns as a total organism and learns by reacting to total life situations. A person cannot be segmented into various parts and each part person cannot be segmented into various parts and each part trained separately from all other related aspects of his life. Emotrained separately from all other related aspects of his life. Emotrained separately from all other related discomforts vitally affect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities so much that they must be reckaffect the intellectual capacities and physical discomforts vitally affect the

life problems.

This concept of education is also built on the theory that a faculty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work coöperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work cooperatively as a team in the solution of ulty group must work and the solution of ulty group must

resource personnel in the community since no one teacher will have adequate background of experiences and knowledge to effectively cope with the many and varied learning situations encountered in such a problem-solving endeavor. This concept of education requires that the teacher have experienced a very broad and comprehensive pre-service and in-service educational program since he must have a reasonably high degree of proficiency in many areas as well as ability to coordinate and utilize varied competencies of other persons. The lack of such training and of such understandings, pointed out in this statement, will be evident when you study the summary results of the research mentioned

Statements Guiding Study. The following statements served as a guide for the various schools participating in this research study. "For the purpose of this study, block-time (including core and core-type) classes are those meeting for blocks of time of two or more class periods and combining or replacing two or more subjects that are required for all students and would ordinarily be taught separately." The following four statements were set forth to differentiate the various type block-time classes.

(1) Each subject retains its identity in the block-time class, that is, separate subjects are taught by the same teacher with (a) Consciously planned correlation, (b) No planned correlation.

(2) Subjects included in the block-time class are unified and fused around a central theme or units of work or problems stemming from one or more of the subject fields in the block-time class.

(3) Pre-determined problem areas based upon adolescents' personal-social needs—both those identified by adolescents themselves and needs as society sees them—determine the operation of the core program. Subject matter is brought in as needed in working on the problem. Pupils may, or may not, have a choice from among several of these problem areas. They will, however, have some responsibility for suggesting and choosing the activities in developing units of study.

(4) The operation of the core program is not pre-determined. Pupils and teachers are free to select the problems upon which they wish to work. Subject matter context is brought in as needed

to develop or to help solve the problems.

(Statements 3 and 4 are the two statements that are usually

accepted by core curriculum teachers as being real problem-solv-

ing situations)

A questionnaire technique was used in making the study. These questionnaires were mailed to all the junior, junior-senior, senior and four-year high schools listed in the educational directory of Alabama that were not included in the sampling study urged by the national Commission and done by Mrs. Grace Wright of the U. S. Office of Education mentioned above.

Results of Study. Of the 389 questionnaires mailed out, 261 were returned; 39 of these reported some type of block-time classes meeting two or more class periods per day; 222 reported no blocktime classes. Of the 261 schools reporting, 164 were combined junior-senior, 73 were separate junior high schools, and 24 were separate senior high schools. The 261 schools had an enrollment of 35,733 in grades 7, 8, and 9 and 31,187 in grades 10, 11, and 12, a combined enrollment of 66,920. Of the 222 schools that do not have a block-time schedule, 25 indicated that they had previously had such a program but had abandoned it for the following reasons listed in the order of frequency:

(1) Inability to get teachers who are willing and able to carry

out this program.

(2) Lack of interest due to teachers not being trained for core work.

(3) It was scheduled for several years and teachers did not

know what to do with it.

(4) Teachers continued to teach subjects separately rather than problems or with no conscious correlation.

(5) Teachers decided that they could do a more effective job

with regular classes.

(6) Difficulty of making a schedule and providing time for planning.

(7) Teachers are subject matter specialists.

These statements clearly indicate the need for more adequate teacher education at both the pre-service and in-service education, in keeping with a philosophy of problem centered education, if core is to succeed.

Of the 222 schools currently without block-time classes, 18 indicated that they plan to introduce block-time classes in the near future. 141 others indicated that they did not plan to to core teachers for needed materials; and one placed number four, in order of importance, free time during the school day for coöperative planning by core teachers. This definitely indicates the critical need for more effective training of school administrators with some understanding of core curriculum work and its implications for improving learning and living before Alabama can go forward with such endeavors.

Only eight administrators indicated any specific kinds of help the core teachers needed or desired: Assistance in more effective planning; Clarification of purposes; Organization and development of instructional materials; Time for coöperative planning; Improved in-service education; Additional money for the purchase of instructional materials; and Reduction of class sizes. This too, indicates the administrators' lack of concern or understanding of real problems confronting core curriculum teachers in that only eight were even aware that such problems exist.

Of the 39 schools reporting block, or core-type classes, only eight indicated that the core or block-time teacher assumes major responsibility for the guidance of pupils. This is very significant, since the core teacher is in position to know the pupils more completely than any other teacher or worker in the school and should assume a major responsibility in helping students solve the personal-social problems.

sonal-social problems constantly confronting them.

The techniques used by core and block-time teachers in evaluation of pupils' work were: 13 teacher-made tests; 11 standardized achievement tests; 11 teacher-publication and rating; 8 interest inventories; 5 sociometric devices; 5 post-mortem reaction sheet of effectiveness of group work; and 4 self-rating inventories of personal and social achievement.

The most serious problems encountered in maintaining a core program as listed by administrators were: 12 obtaining adequately prepared teachers; 9 insufficient teacher time for planning; 5 lack of adequate instructional materials; 4 necessity for constant in-service training of teachers; 1 gaining coöperation of other members of the faculty; 1 teacher reaction against change; and 1 scheduling problems. Not a single administrator checked as a serious problem failure to gain public support.

The types of instructional materials prepared by various core classes were listed as follows: 5 descriptions of practices; 4 re-

cording of class procedures; 3 each of the following: film-strips, teacher's handbook and evaluative data; and 2 films.

In response to the question "Will you need the services of teachers trained to do the type of work set forth in this question-naire in your individual school next year and how many such individuals will you need"?, 28 administrators indicated the need for such teachers and said they would need a total of 172 such teachers. This, too, seems to indicate the critical need for teacher educational institutions of Alabama to re-evaluate teacher-educational programs with the view of including the preparation of core teachers as an integral part of such programs.

In closing it seems apparent that teachers in general are inadequately prepared to do effective problem-solving teaching.
This should be of great concern to the teacher educational institutions. There also seems to be clear evidence to point up the fact
that school administrators do not understand effective means of
initiating, planning, and developing school situations dedicated
to problem-solving teaching and are in dire need of leadership
competencies to implement such educational programs. This,
too, poses a problem of major proportion to teacher educational
institutions.

The writer is thoroughly convinced that more effective educational programs at the pre-service and in-service level are a "must" if education is to keep pace with the rapid advances in science and technology and our democratic way of life.

SOME COMMENTS ABOUT STUTTERING FOR TEACHERS

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Stuttering presents an important and interesting problem to the classroom teacher. Ordinarily, as we know, pity is stimulated by the agonizing difficulty the youngster has articulating. The teacher waits, as does the class, in painful identification with him for each word to emerge. Time and emotional tension are the toll in this picture.

The teacher wants to help the youngster. A frequent point of concern on her part is the possibility of ridicule and laughter on the part of his classmates. As a result he will be protected from

too much reading and recitation.

In a brief survey of available periodicals that are intended to give some insight into the structure and dynamics of the symptom of stuttering, it is found that there is little common agreement on causation and less that is of help to the teacher. The majority of the articles are concerned naturally enough with the do's and don'ts for her in respect to the stutterer. In evaluating them one is forced to agree with them in particulars and yet to be left frustrated on completion.

For example, teachers are cautioned against emphasizing perfection of speech, permitting his classmates to ridicule him, using devices to eliminate stuttering such as taking a deep breath, arm swinging, etc. They are told to avoid strict discipline or loud commands. Encouragement is given to develop other personality attributes of the sufferer. Teachers are asked to help build his self-

Some articles stress again and again that the teacher become adjusted to the stuttering and learn to react unemotionally. She is asked not to show boredom, embarrassment or impatience. Cleanliness and neatness are stressed as important with the thought that the child would gain security from order. Teachers are asked to tell parents that the sufferer should receive much sleep and vitamins.

One is impressed by the two serious omissions in the literature

reviewed in respect to the teacher: an understandable dynamic explanation of stuttering which would make the behavior more intelligible, and some orientation to the feelings of the teacher in order that she be left with minimum guilt over her natural reaction of frustration. It is with these two omissions that we are concerned in this brief report. The literature has conveyed what we believe to be an unfounded sense of optimism in respect to alleviation of stuttering and, by implication, has bound the cure to the restraint and inhibition of the teacher's feelings.

Perhaps a review of the probable core of the symptom will cast some light on the almost insurmountable problem of the teacher. Stuttering is a historical monument commemorating an ancient conflict between two psychic tendencies in which only a debilitating compromise was achieved. More precisely and technically stated, it results from a disturbance within the mental structure in which the speaking apparatus unconsciously and in a distorted way gives expression to originally repressed impulses. In modern parlance we say it is a neurotic symptom since it substitutes for a repressed instinctual satisfaction. Stuttering is a special kind of neurotic symptom since it expresses itself through a change of physical function. In this way it falls into a group of neurotic disorders which include hysterical paralysis, seizure, varied physical complaints and inability to speak.

Historical events in the lifetime of the stutterer have determined why the speaking apparatus was selected as the particular function. When any physical function is given the unhappy lot of becoming unconsciously fused with a repressed impulse it cannot perform efficiently; for example, should eating become unconsciously charged with sexual or aggressive significance then one

cannot eat or eats poorly.

Since both the forbidden impulse and the frightened defense against it are in the unconscious, the symptom is not amenable to orthodox educational methods. Treatment by those who understand these forces may unearth the buried conflict and bring it into the light of day for revaluation by the sufferer. The symptom is rendered complex by multiple causes which are infinitely more important than itself. Generally one precondition is an infantile disturbance in nursing or eating. This can vary in extremes from excessive concern over eating on the part of the mother to trauma such as interference with thumbsucking or illness affecting eating or sucking. A second precondition seems to be the character of the training for bowel control, where mothers, wittingly or not, have made the bowels important and the youngster retains out of anxiety.

The retention, unfortunately for the future, becomes pleasurable and our sufferer has difficulty leaving this phase of development. This period is the most decisive one for the later symptom of stuttering. It is at this time that the typical little child's ambivalent tendencies are at their height. Normally all children wrestle with their aggressive feelings and their love feelings toward parents in this period. Their love, or rather fear of loss of love of the parents, aids them in neutralizing the anger and eventually they are able to fuse both drives into the relationship. The stutterer cannot fuse, he can only oscillate between the two feelings. The likely disturbance of the nursing period has assisted the inability to neutralize by developing a premature charge of aggression with which the weak young personality is unable to cope.

The retention of the bowels provides the safest means of expression of aggression without retaliation. What can the poor mother do in the face of such passive resistance? Stuttering, in a sense, is the prototype of the picture of the child sitting on the toilet seat with the anxious frustrated mother waiting, waiting. We need only to substitute the teacher for the mother as the former also waits, frustrated, for the contorted child to produce a word. From this comparison, we are able to see clearly the unconscious aggression involved in stuttering. It is helpful to keep in mind that speaking is learned during the toilet training period and tends normally to express the aggression of children. Gesell found stuttering usual in three-year-old children. The teacher is more likely to receive the brunt of the unconscious aggression than anyone else in the child's environment at this time, including the mother, precisely since she is also an educator. The mother was the first educator in respect to the bowels and the teacher inherits the mantle of the educator be it a shining one, bright with success, or a dented one, frightening with failure. It brings to mind the example of a five-year-old girl who has developed a device of breaking her stuttering in class by sticking out her tongue. We can be certain that the poor sufferer saw no connection between the two pieces of behavior.

It should be possible at this point to understand stuttering from

a dynamic viewpoint. The holding back has been displaced upwards to the holding back of words with the oscillation swinging out of anxiety to pushing out. The push-pull is the characteristic of the stutterer. This feature of ambivalence pervades other behavior of such a child.

It is possible that the teacher might find some practical help in

the foregoing material.

First, it would seem that the unconscious aggression of the teacher would usually react with aggression to the unconscious aggression concealed in the stuttering. Since the entire process is unconscious we might expect the conscious reaction of the teacher to be, uniquely, whatever defense she herself has erected in her

own development against her early aggression.

A typical reaction would be guilt and perhaps this feeling particularly explains the solicitude and concern we feel for the young neurotic. It might further explain why we will tolerate so much from him. Guilt arising out of an unconscious aggressive reaction may be responsible for other reactions from the teacher since some aggression manages to seep to the surface in concealed displaced reactions. For example, might not the concern of some teachers regarding the cleanliness and order of the stutterer, the recommendations of more sleep and vitamins, and restriction of play contain an element of unconscious retaliation? The importance of the unconscious aggression as a component of stuttering should be examined by the teacher since it establishes the normalcy of her inner aggressive reaction when it occurs. An awareness of the possibility of her own aggression might make for greater personal comfort and further assist her in a more realistic approach to the

A second possible aid to the teacher might be not to duplicate child. the unwitting educational errors of the mother—specifically the problem of pressure to produce for the teacher. Our formulation assists in understanding that pressure on the stutterer must result in unconscious anger which in turn increases the ambivalence that is reflected in stuttering. Ordinarily, we may rely almost entirely upon the unusually strong need of the stutterer to secure the recognition and approval of the teacher to compensate for the lessening of the pressure. In a sense, it is important for our young neurotic to feel that the teacher has no personal stake in his ed-

ucational efforts.

Further, since it is clear that stuttering is the result of an oscillation between the wish of the youngster to hold back and to push out words, the teacher might react to each phase. For example, when the child is holding back words, evidenced by the intake of breath or repetition of words, the teacher might feel the natural inner reaction to pull out the words. This reaction needs to be understood, not fought against or denied, since it is appropriate. Severe stuttering in this sense expresses his need to hold back and not produce at the time. We can convey through our general attitude, as stated above, that we have no need for the words if he is not ready.

It would be appropriate to return to our theoretical formulation again and ask why such a remnant of infantilism has remained in the psychic structure of our young student. There is general agreement that stuttering is a regressive phenomenon. This is to say that in the chronological period roughly four to six years when all children come to grips with their strong strivings for the parent of the opposite sex and the aggressive phantasies toward Dunkerque. The preconditions which were mentioned bring the child into battle poorly prepared. The new charge of aggressive from the traumas of the oral and anal phases to force the threatness the most satisfaction with the conference of the same sex.

The regression makes intelligible the revival of stuttering and other infantile characteristics which are apparent to teachers. The neurotic's character will be displayed. It may be generally said dents and were it not for this symptom many teachers would find educational standards vary, other facets are easily observed. A case example will illustrate the point

Ralph, aged 6, a handsome intelligent child, was referred for treatment of severe stuttering. He was well-liked by his classmates and by the teacher, whose own standards for performance were very high. The parents were interested, intelligent parents who had unconsciously permitted early traumatic and educational errors to occur. Further, at 1½ years, the infant had been accident-

ally poisoned requiring hospitalization with use of a stomach

pump.

In the early part of treatment, Ralph's great fears were verbalized and when they were connected to his strong unconscious aggressive drives, the security of the treatment relationship permitted a freer conscious aggressive expression. Because she knew he was under treatment and was uncertain of her own rôle, the teacher relaxed her discipline somewhat and accepted the aggressions.

For a short period the aggressions were exaggerated and the teacher suddenly found that her Dr. Jekyll had become a Mr. Hyde. In class he became a ringleader at instigating mischief and rebellion. On the playground, through threats and bribery, he enforced his will. At one time he sat on a jungle gym crosslegged and threw penny candy to his grovelling slaves.

Therapeutically he was helped to understand that he had in-

completely mastered his infantile aggressions.

For the teacher this example makes it clear how important the classroom atmosphere is as an aid or detriment to the stutterer. For him, as for other children, the too strict classroom reinforces the aggression, in turn increasing the anxiety, while the too permissive classroom weakens the defense, permitting too much aggressive expression. A healthy balance is obviously needed.

SUMMARY

Stuttering is a deep-seated conversion symptom usually amenable to treatment by specialists able to bring these causes into the open. Teachers may make the sufferer somewhat more comfortable by relaxing a too strict educational and moral atmosphere. It is well to evaluate classroom atmosphere to determine whether the victim's unhealthy defenses against aggressive expression are not unduly reinforced. Teachers should decide first pression are not unduly reinforced. Teachers should decide first whether they are able to tolerate and educate aggressive expression before strict classroom discipline is loosened. The occasional sinner aggressive reaction of the teacher is quite appropriate in light of the unconscious component of the symptom.

Stutterers ought to be referred as soon as possible to visiting teachers for study and possible treatment. The symptom can appear for short periods and disappear, both situations being dependent on temporary biological, psychological and environmental

factors. It might appear in the life of any child temporarily when, for various reasons, the need to hold back is important. We find when the child does not feel under any undue pressure at school and home it will disappear. For this reason a careful study is required to determine whether the symptom is an expression of a temporary dislocation of psychic forces or one which represents a deep-seated pathological disturbance.

To repeat, because the causes of the stuttering symptom are so deep-seated and of such long standing in the child's life, no teacher should feel a sense of failure in the face of the continuance of such a problem

IMPROVING TEACHING THROUGH SUPER-VISION: HOW IS IT WORKING?

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Supervision may be broadly defined as services provided for the improvement of instruction. Since the teacher plays an integral rôle in instruction, improving the teacher may also be considered a

goal of supervision.

A review of current literature concerning supervisory practices indicates that the trend in supervision is, or should be, away from such things as directing, telling, demonstration teaching, and surprise visits to the classroom by the supervisor. Further, the literature indicates the trend in supervision is, or should be, toward such things as workshops, faculty meetings, and study groups in which the supervisor acts as consultant and advisor. The trend seems to lead in the problem-centered direction. That is, the best way to help a teacher improve is to help him find solutions to his problems.

If one accepts this developing theory of supervision he makes certain assumptions. Very little research has been done to determine whether the assumptions implicit in this theory of supervision are actually working out in practice. However, reports of research are available which deal with the following three assumptions

underlying the theory of supervision.

(1) If both the supervisor and the teacher are going to be working on the teacher's problems, they will arrive at a more common perception of those problems.

(2) The supervisor and the teacher will arrive at a more common perception of the best methods for arriving at solutions to the

teacher's problems.

(3) Teachers working in small groups, with a supervisor as con-

sultant, will improve their teaching.

Testing the first assumption, Tower (8) studied a group of beginning experienced and inexperienced teachers in an attempt to determine whether they were receiving as much help as they desired with the problems that they felt were important. He found that the group of teachers which he studied felt that more help was received than was necessary with problems dealing with human relations. The teachers also felt that they received less help than they needed with personal and professional problems. Tower hypothesized that the teachers were not aware of some of the teaching weaknesses which were seen by supervisors. It might also be hypothesized that the supervisors were not aware of the real problems of the teachers. In either case, the differences of perception of the problems would cause a great deal of difficulty if attempts were made to work on common problems.

The greater number of research studies dealing with differences of perception between teachers and supervisor concerning methods of arriving at solutions to the teacher's problems makes it possible to obtain a much clearer picture of the practices in that area. One researcher questioned a group of teachers and principals concerning the supervisory methods they considered most helpful for improving instruction. Teachers and principals ranked, according to their belief of relative merit, twenty supervisory practices. The rankings of twelve and thirteen from the principals. Other differences of perception as to the worth of the various supervisory practices listed on the questionnaire were also evident (7).

Another study indicates that there are great differences of perception between teachers, supervisors, principals, and superintendrole of status leaders in carrying out faculty programs. For the supervisor who believes in working with small groups of teachers the differences of perception that exist may be of extreme importance (6).

A principal or supervisor is likely to consider the improvement of instruction as the most important aspect of his position. However, one study indicates that the teachers may have a different perception of his position. Shuster (5), after studying the replies of 452 teachers to a questionnaire which he devised, found evidence to support the conclusion that "a principal's personality and human relations contacts had more of an effect on teacher morale than his physical or mental characteristics, his professional background and experience, his work as an improver of instruction, or was not whether the principal tried to improve instruction by the latest methods or not."

A study of the problems of supervising non-professionally trained teachers in Virginia presents probably the most striking results of the differences of perception concerning supervisory methods of helping the teacher improve. One hundred seventynine teachers were studied. Of this group 31 per cent indicated that they had received some supervisory help, a majority of it from other teachers, not from the principal or supervisor. Only three of the group of teachers indicated that they had strengthened their teaching weaknesses through help from the supervisor. Two-thirds of the teachers indicated that they wanted more supervision. Over half of the group of teachers studied left the profession after teaching only a short time (4).

The results of the Virginia study are borne out by Bail's study of four hundred twenty-four teachers. Only 4.3 per cent of the group thought that they received democratic, helpful supervision, although 69.4 per cent stated that they received some supervision. (1) It would appear that much of the supervision which the teach-

ers received was given in ways that did not help them. Do small group meetings help teachers improve their methods of instruction? The replies of teachers in several research studies indicate that teachers attach about equal importance to group methods and individual counseling methods. Two studies deal directly with attempts to change teaching behavior by engaging teachers

in a series of small group discussions.

McNassor (2) studied a workshop of seventy-four teachers in a college graduate school. He found that attitudes and behaviors of the teachers changed while they were engaged in the workshop activities. However, the conflicts and pressures of the school situations, when they returned to teaching, caused them to revert to the

old ideas and ways of teaching.

Newcomer (3) reported a successful small-group experience. The group studied consisted of eleven elementary teachers and their principal. The meetings of the group were conducted informally in private homes. The teachers were evaluated by objective measures both before and after the series of meetings. Results indicated that the teachers had improved. No mention was made of the change in teaching behavior, if any, on the part of the teachers.

To summarize, certain assumptions are implicit in the developing, democratic theory of supervision. The problem-centered approach to supervision implies that the teacher and supervisor will

develop a more common perception of the problem needing solution and the method of working for solution. Implied by the democratic concept of supervision is the assumption that small group discussions concerning teachers' problems will help them improve their teaching methods.

A survey of the research dealing with supervisory practices reveals that: (1) A difference of perception between teachers and supervisors does exist concerning the nature of problems confronting teachers; (2) Differences of perception between supervisors and teachers exist concerning methods of dealing with the problems which teachers have; and, (3) It has not been demonstrated that the use of small group techniques is either the most effective or the most efficient method of helping teachers improve.

In conclusion, it is granted that the research in these areas is not conclusive, but that which is available leaves some question that the developing theory of supervision is being realized in practice. It is impossible to say whether the theory is not implemented in practice or whether it failed in practice where attempts were made

- (1) P. M. Bail, "Do Teachers Receive the Kind of Supervision They Desire?" Journal of Educational Research. 40: 713-16.
- (2) Donald McNassor, "Conflict in Teachers Who Try to Learn About pildren." California 1. Children." California Journal of Educational Research. 2: 147-55. September,
- (3) Leland B. Newcomer, "An Informal Approach to In-Service Training."
- California Journal of Educational Research. 3: 14-17. January, 1952. (4) Albert H. Shuster, Jr., "Supervision and Non-Professionally Prepared Rechers." Educational Ar., "Supervision and Non-Professionally Prepared Rechers." Teachers." Educational Administration and Non-Professionally Preparents.

 1956.

 Teachers." Educational Administration and Supervision. 42: 280-7. May,
- (5) Martin Silverman, "Principals—What Are You Doing to Teacher orale?" Educational A. Principals—What Are You Doing to Teacher Morale?" Educational Administration and Supervision. 43: 204-10. April,
- (6) M. L. Story, "Defining the Administrative Function." Journal of Edutional Research, 48: 271 cational Research. 46: 371-4. January, 1953.
- (7) Melvin M. Tower, "A Study of Orientation and In-Service Education and Indianapolic Poly of Orientation and Indianapolic Poly of Orientation Practices in the Indianapolis Public Schools." Educational Administration
- (8) Melvin M. Tower, "A Study of Problems of Beginning Teachers in the dianapolis Public Schools" By the Problems of Beginning Teachers in the Supervision. Indianapolis Public Schools." Educational Administration and Supervision.

 42: 261-73. May. 1956

SOME FACTORS THAT COMPLICATE LAY PARTICIPATION IN CURRICULUM DEVELOPMENT PROGRAMS

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Apparently the time has come when we should re-examine some of the assumptions that guided administrators in bringing laymen into curriculum planning and evaluation. In recent years the writers in the field have continuously advocated the use of lay people in the schools' program for curriculum improvement. Almost without exception there has been increased emphasis on the rôle of laymen in planning instructional improvement programs. From statements by writers in the field and from some of the comments from administrators, one may reasonably assume the following statements to be held valid by this group:

(1) It is necessary to have laymen participating in a curriculum development program in order to have an effective school-commu-

nity relations program.

(2) Laymen will give curriculum study programs serious study and seek answers to complex problems when they are invited to participate on curriculum committees.

(3) It is safe to move forward in the program when a "committee of laymen and school people" make decisions concerning curricu-

him matters.

(4) The individuals representing civic groups, organizations, and community agencies represent the majority of the people in the community.

(5) The major problems that confront education in the area of

curriculum instruction can be solved at the grass-roots level.

The purpose of this article is to analyze some of these assumptions in terms of important concepts or principles that are accepted by professional people in the area of curriculum development.

One of the most difficult problems to be worked out in connection with a curriculum development program is the time factor. This, in itself, is difficult to work out with a staff of teachers even in a small system. Most curriculum people would agree that a development program should a be part of the over-all program of education and that an organization should be set up to provide sufficient time for curriculum activities. The problem becomes more complex when lay people are brought in to participate in curriculum planning and follow-up activities.

Not only is the time factor important, as far as the amount of time given to committee meetings or study group conferences, but the time for individual study and follow-up work that is necessary to follow through on developmental activities. Individuals who have worked in curriculum study programs are aware of the length of time involved in school improvement programs. A program can hardly be effected in less than a year or two. How can we expect laymen to follow through on a curriculum committee or a study group working in the in-service education program for a length of time that is required to carry through on a program of in-service education?

Another important factor that complicates curriculum development work is that commonly referred to as group dynamics. This one alone is a challenge to effective curriculum work that involves only teachers and administrators. There are a number of subjects that might be mentioned in this area. Perhaps communication is a major one because it is necessary to use professional jargon in order to communicate certain ideas or concepts. Naturally the layman does not understand the terminology that is often used. In some instances we may find other words to express our ideas but it is necessary to use some terms that are peculiar to teaching; otherour communications more effective. Also these words grow out of a professional education.

The range of individual differences that is represented in any group assembled to study curriculum problems is broadened considerably when laymen are brought in. We cannot expect individuals who are not in the teaching profession to be able to understand and attack the various problems that confound curriculum development or to operate at the same level as people who have had propsychology.

The problem of relationships centers around such things as beliefs, attitudes and value patterns of individuals related to educa-

tional objectives, learning theory, methodology and other significant aspects of curriculum and instruction. These form a complex situation which characterizes group work effected through the democratic processes. It is difficult enough to work with teachers who have various points of view, and who represent different levels of achievement toward educational goals, and educational backgrounds, much less to take a group of laymen who have had little or no background experience in dealing with curriculum development and attempt to move forward with a program concerned with utilization of educational research, and the application of recent developments in the field to local problems in a school situation.

The development concept that underlies curriculum work is a point of view that the ordinary layman may not understand. Usually individuals are more interested in arriving at a decision too early for effective group work, unless they have had experience in group process work. Not only is this a tendency that limits effective group work, but there is too much attention given to voting or "pushing things through," as political groups often operate, in order to make a decision or set a course of action. The problem of differentiating between means and ends in education is not understood thoroughly by many lay people. There seem to be many administrators who are not too clear on just what responsibilities are to be assumed by the layman, not only in the area of curriculum instruction but in other areas of education. To illustrate this we may take one of the problems that has been quite common for committees composed of representatives of community groups and teachers; namely, that of revising the report cards. It has not been uncommon for curriculum study groups to begin a study of the reporting system. There are a number of things related to this problem that are challenging to everyone involved. In the first place, there is educational philosophy, psychological principles that underlie learning, individual versus group effort, individual effort versus individual potential, and the relatedness of guidance to instruction. It is little wonder that so few schools have revised their report cards in line with the modern concept of education as a result of lay-teacher committees.

The writer believes that parents and representatives of community groups should be brought in to study school problems and to work coöperatively toward educational goals. However, laymen should be brought in at the orientation level in order for them to

understand objectives of the instructional program and plans formulated for curriculum development. After a study has been made of the existing situation, educational leadership should continue to extend greater opportunity for lay participation for the purpose of developing a perspective of the total program. No attempt should be made to involve lay people in developmental activites associated with the production of courses of study and the evaluation of the instructional program unless individuals have participated in a program of orientation for curriculum study and appraisal.

If curriculum change involves the development of attitudes and reorganization of various behavior patterns on the part of individuals then we need to re-examine the idea of bringing laymen in on curriculum study. We cannot expect to re-educate or change the attitudes of adults as they concern such things as psychological principles of teaching and learning and methodology that is consistent with educational philosophy.

The point of view expressed in this article is based on the theory that there are various levels of participation of individuals in any group study or committee type of organization. These may be thought of as stages based on the complexity of the relationships and the involvement of individuals in an on-going program. Thinking in terms of moving from the simple to the complex they may be

(1) Orientation—developing understanding which require listening skills;

(2) Activation—emphasis is still on listening and understanding, but there are some responses and some activities on the part of individuals;

(3) Organization—represents the third level and involves more activity on the part of participants and a coördination with various facets of an on-going program;

(4) Evaluation is the fourth level. This places a greater amount of emphasis on individual study, problem analysis and the application of principles to specific situations. Also it involves collecting informations. information and developing programs in terms of objectives.

(5) Revision or modification represents the highest level of curriculum development. This is the area in which we become involved in development. in development. This is the area in which we become tivities providing the exploratory or try-out activities providing the exploratory or try-out activites, providing a situation that will support individuals in their attempts to try different things or change practices.

Perhaps the last two are the basic factors in curriculum development and field research. These seem to represent a fairly high level of operation in a curriculum development program, not only in terms of the concepts and methods that are employed but the amount of time and the necessary materials and resources that are needed in effecting a school improvement program.

We should not expect people outside professional education to be able to participate at the fourth or fifth levels unless they have worked through the various stages in group process work. The question in this discussion is whether or not we may expect laymen to become involved in evaluation and modification of curriculum probecome involved in evaluation and modification of the developmental program?

If we accept the idea that curriculum change is, in effect, a change of individuals or re-education of individuals, then we should re-evaluate the idea of asking laymen to actively participate in a program designed to bring about curriculum changes. There are two statements that are made by the Lynds (1) concerning their two statements that have significance for supervision on this study of Middletown that have significance for supervision on this study of Middletown that have significance for supervision on this subject; namely, (1) the position of the parent with respect to subject; namely, (1) the position of the parent with respect to the school varies from one social stratum to another, and (2) we cannot assume that there is a unified public that knows what it wants not assume that there is evidence to support the idea that different groups in the community want different things for their chilent groups in the community want different things for their chilent, included in this list are the interests and objects in education. Various interested groups in a given locality have different conceptions of the functions of education.

"These conceptions range all the way from a belief that education should meet the bare rudiments of knowledge and skills to an evangelical faith that education should lead the way to new social order. The individual education education should lead the way to new social order. The individual education education should lead the way to new social order. The individual education education satisfied with these two polar positions, institutions are usually a compromise between these two polar positions, with the result that many persons are not satisfied with the rôle that the with the result that many persons are not satisfied with the rôle that the school plays in the community" (2).

The point of view expressed here may be summed up by saying that in the opinion of the author, parents should participate in the program of education for their children but this participation program of education for their children but this participation should not extend into the highest levels of operation that characterize an in-service education program planned to provide profesterize and other staff personnel. Parents and representations of the provide professional growth experiences for teachers and other staff personnel.

sentatives of community groups have the responsibility within our democratic philosophy of education, for deciding what kind of education they want for their children and providing the necessary materials and resources for achieving these goals. However, professional school people should be responsible for setting the program in operation and making the necessary changes or adjustments in keeping educational planning abreast of the times in a dynamic society.

Curriculum and instruction constitute the focus of education; if the ordinary laymen can make decisions and suggest actions in a manner comparable to someone who has been trained in this area, then there is no place for specialists in education. In fact, unless the technical problems that are related to curriculum development are reserved for staff personnel who have special training and background experience in the area of supervision and teacher education, education cannot hope to attain the status of a profession in our society. Without this attainment, public education in the United States cannot rise above the level of "politics" and operate beyond the limitations of that concept of expediency that evolves from laissez-faire administration and moves with the direction of the pressures applied by the most vociferous elements in the community. The youth of America deserve a better type of leadership than is characterized by this type of an educational program.

REFERENCES

(1) Robert S. and Helen M. Lynd, Middletown. New York: Harcourt, Brace and Company, 1929, pp. 218-222.

(2) Francis E. Merrill and H. Wentworth Eldridge, Culture and Society. New York: Prentice-Hall, Inc., 1952.

BOOK REVIEWS

DAVID KRECH AND RICHARD S. CRUTCHFIELD. Elements of Psychology. New York: Alfred A. Knopf, 1958, pp. xxi + 700 + xxxvi.

In the present development of psychology towards a rigidly objective science with new and technical vocabulary, on the one hand; and, on the other, a cosmopolitan, historically oriented, scientific text with the vocabulary of the present dictionaries, this volume belongs to the latter. (Exception noted: a new term "Perfink.").

After an introductory, propaedeutic chapter, (Chapter 1) the text proceeds to deal with the detailed study of psychology in four parts: 1) Perception (Chapters 2–7); 2) Motivation and Emotion (Chapters 8–12); 3) Adaptive Behavior (Chapters 13–18); and, 4) The Individual (Chapters 19–25). Following this there are a General Glossary; Review Index to Chapter Glossaries; and, The

Subject and Name Index.

Since there is no definition of psychology, the student is invited to study the text to discover what it is and what it is about. He will find that the presentation is comprehensive, extensive, primarily experimental and factual, and not overburdened with theoretical explanations which do not explain. In fact, the authors, although they present considerable physiology, wisely warn that many explanations have been wrong and "much that we think we know is probably wrong." The student will not have to wade through what was once thought to be helpful in order to find that which is now considered to be acceptable. He may miss a historical introduction which many students and instructors like; and he will not find a section on scientific method but will find indications of scientific and psychological methods of research in the reports of many experiments.

The psychology comes from many schools and there can hardly be said to be any prejudice on the part of the authors, unless possibly that of experiment. The material presented includes introspective, behavior, Gestalt, psychoanalytic, clinical, genetic, testing, statistical and especially, experimental findings. It is probably one of the most complete of present day texts, and quite representative of the psychology of today. Summaries of chapters

and chapter glossaries add to the value of presentation along with more than 200 illustrations, most of which are new.

A special feature of the book lies in the 169 boxes distributed throughout the text giving reports of experiments. These are interesting, brief reports and summaries that add to the clarity and understanding of the context and indicate various methods of psychological research as well as the results of the studies.

Suggestions for further reading appear at the ends of chapters and a carefully made bibliography of all works cited is appended.

The index indicates the extensive material to be found in the book but does not serve as well as it might. For example, "Generalization" does not appear yet it is discussed in the text. Under "Law" only one law is indicated (Effect). Others are to be found under specific headings, (Exercise, and Least Effort). Learning is more richly treated in the text than is shown in the index. "Redintegration" does not appear.

If the size and price of the text (\$6.50) are considered objectionable it should be remembered that this text gives enough to include much or all of the outside reading that would be required with a

This text is more than usually interesting and clear, especially with its many illustrations and boxes. For the most part it is written as simply as the subject matter permits and is quite free from unnecessary and nauseating jargon. It will be valuable both as a text and a reference and is a book that many a student will prefer to keep rather than to sell when the course is finished.

A student Work Book is available.

A. S. EDWARDS

The University of Georgia

S. STANSFELD SARGENT AND ROBERT C. WILLIAMSON. Social Psy-York. The Repold D. to the Study of Human Relations. New York: The Ronald Press, Second Edition, 1958, pp. 649.

Laid under contribution in this text are general and experiental psychology about this text are general and experientally mental psychology, abnormal and clinical psychology, child study, anthropology anthropology, sociology, biology, ethnology, political science, Psychiatry, and psychography ethnology, political science, Psychiatry, and psychoanalysis. The interdisciplinary nature of Social Psychology is emphasized by Figure 1, which shows Social Psychology at the center, and, around it, Psychology, Sociology, Psychiatry, Cultural Anthropology, Political Science, History, and Economics.

"Social psychology is the scientific study of persons as members of groups with emphasis on their social or interpersonal relationships. It focuses on the individual's behavior, as it affects, and is affected by, the behavior of others." The research methods of social psychology are discussed under the heads of introspection (not in the limited sense as defined by Titchener), uncontrolled observation, systematic observation (including the developmental and case history techniques), and, experiment. "Since the 1920's many hundreds of experimental studies in social psychology have been made, almost exclusively by psychologists."

"The authors, trained in both psychology and sociology, are trying to present an integrated and practical approach to social

psychology."

After a brief historical introduction and discussion of methods, the text proceeds to deal with the subject matter in five parts. Part 1 discusses the cultural and social forces involved in personality development. Part 2 deals with the cultural and social problems of socialization with emphasis upon dynamic and cognitive processes.

Part 3 considers interpersonal relations including communication, modes of social interaction, social rôles, leadership, and, the person and the group. Part 4 is concerned with public opinion, propaganda, mass behavior, social change and the psychology of social movements. Part 5 is interested in how human relations can be improved and stretches from applications in small groups to

those that are possible in international relations.

The coverage may be considered quite comprehensive and inclusive of not a few controversial matters. The Subject Index (pp. 641-649) is generally well made and includes acculturation, anxiety, anti-Semitism, attitudes, booms, character structure, communication, communism, culture, defense mechanisms, delinquency, education, exploitation, fads, fashion, gangs, group psychotherapy, feral children, lobbying, negroes, American Indians, moral rearmament, values, "Windigo" psychosis, world government, and world language. It might also have included individual differences and racial integration. The wide use of materials is also indicated by the Name Index (pp. 629-640), as well as by the extensive footnote references which occur at the foot of nearly every page. Supplementary read-

ings are also indicated at the ends of chapters.

In this revised edition (First Edition-1950) and with a "fieldtheory approach" the authors present a comprehensive statement of the subject as it is found at the present time, immensely different from that of fifty years ago. It is characterized by generally good judgment, careful selection of materials, extensive references for further reading. It is well and interestingly written with a number of illustrations that add to the interest. It will probably have wide use as a text and can be understood by general readers with a minimum of psychology.

A. S. EDWARDS

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RUSSELL N. CASSEL. The Psychology of Instruction. Boston: The Christopher Publishing House, 1957, pp. 143.

Experience in training prospective and experienced teachers for nearly a decade finds expression in five chapters which emphasize the essentials of teaching especially in terms of learning. "In the guidance of learning activity, the teacher plays a rôle in designing and structuring the learning situations, and through the structuring the learning is either facilitated or retarded."

The chapter headings are: The Nature of Human Intelligence, Developmental Learning, The Principles of Learning, Retention and Transfer of Training, The Principles of Learning, Retention and Transfer of Training, Methods and Techniques of Learning,

and, Evaluation of Instruction.

After a somewhat philosophic introduction, the main discussions llow with the ometafollow with the emphasis upon learning including the obtaining of transfer of training. Note that the contract of training of the contract of training of training of training of training of the contract of training of training of training of training of the contract of training of training of training of training of the contract of training of the contract of training of trai transfer of training. Nine learning including the optaming in the order of degrees of order of degrees of freedom for the learner. Under Principles of Learning, ten primary Learning, ten primary and a considerable number of secondary principles are discussed and a principles are discussed. Well known methods of teaching and a number of "techniques" number of "techniques" are considered with continued emphasis upon the idea that "" upon the idea that "the instructor structures the learning situation..." In an unnumbered Chart, nine "Methods of Teaching"

are shown with the indication of which are instructor-centered, and which are student-centered.

There are many helpful suggestions for student teachers and some broad generalizations that may find disagreement. A few selected references are given at the ends of chapters. Selected quotations, poetic and otherwise, appear at the end of the preface, of the introduction, and of most chapters. Perhaps we note also the breaking through of a gentle humor in the use of such terms as "Irregardless," and "Purdiguous."

While the reviewer offers congratulations to the author for the many helpful insights presented, it still appears that the main defect of the book is failure to emphasize, what has been so much lacking in the training of teachers, namely, mastery of the subject to be taught, together with a deep interest in it and in the learner.

A. S. Edwards

The University of Georgia

John M. Hadley, Clinical and Counseling Psychology. New York: Alfred A. Knopf, 1958, pp. xv + 682 + xix.

Clinical and Counseling Psychology are dealt with in this volume as hardly distinguishable; the supposed differences are accorded courteous recognition in a short section: the two are found in somewhat different settings, have a somewhat different clientele, and have different divisions in the A. P. A. Noting the need for trained personnel, the author writes that "This book has been designed as a tool for training the needed men and women. Intended as a preview of the profession, it is a textbook for the introductory course in clinical and/or counseling psychology."

With a varied experience in several fields of psychology and as an administrator "of a university training program in clinical, counseling, and school clinical psychology," the author is prepared to give a unified presentation for the work of clinical, counseling and school psychology.

"The ultimate purpose of all clinical and counseling procedures is the alteration of a person's behavior into more constructive channels."... "The problems presented to the practical clinician are the problems of specific individuals."... "the problems of the

client should determine which techniques should be used." The

approach in this book "is essentially client-oriented."

Following an introductory chapter which gives historical orientation, the book is divided into four parts: 1) Applications of Psychological Theory, 2) Practical Procedures and Techniques, 3) Evaluation and Assessment, and 4) Professional Issues.

Discussion of theory emphasizes certain outstanding schools and practices, especially, problems of insight, emotional release, tension reduction, supportive therapy, relearning and socialization.

Part 2 deals especially with environmental treatment, group counseling and therapy, vocational guidance and special problems of the handicapped and disabled, speech and reading defects, and

Part 3 deals with methods including the anamnesis, diagnosis, and tests for intelligence and personality. Descriptions of a large number of tests are given; this part includes pages 295 through 556 and the student will find much information about the tests now used in psychological work.

The final part will be of special interest to many readers, since it discusses many of the difficult and problematic issues of a developing profession: the scope of professional psychology, its relations with medicine, education, correctional institutions, psychiatry, law, and religion. It includes also a brief but important consideration of the need for research and probable future trends.

A valuable feature of the book lies in the rich bibliography. All of the twenty-four chapters end with references that indicate a

great deal of the best literature on the various subjects.

In this field where it is difficult to find satisfactory texts, this volume is outstanding in relative completeness, clearness, good judgment, and generally, good selection and balance of material. It is not overburdened with unverified hypotheses, and is quite free from vague and ambiguous language, especially the strange jargon

There are a useful glossary, name index and subject index.

The book will be interesting and richly informative for students of psychology and for others who desire to become acquainted with this rapidly developing field of psychology.

A. S. EDWARDS

The University of Georgia

DOROTHY STOCK AND HERBERT A. THELEN. Emotional Dynamics and Group Culture: Studies of Individual and Group Behavior. No. 2 of the Research Training Series, National Training Laboratories. New York: New York University Press, 1958, pp. 296.

This progress report of work begun in 1951 is full of suggestions for the increasing number of educators who are vitally concerned with the development of individual learners through their membership in class groups and in subgroups within the school class. While the group dynamics movement has been criticized for overconfidence in the benefits of "groupness" and for overdoing "permissiveness," the reader of this volume will find that safeguards against imbalance have been incorporated consistently as the research has gone forward. The report itself carries out the decision to be "wary of the separation between individual, group, and societal levels," and of the "distinction between 'emotion' and 'cognition" (p. 5). Thus the study is interdisciplinary in cutting across and trying to integrate aspects of behavior commonly studied separately by clinical and personality psychologists, social psychologists and sociologists, or anthropologists. This work thereby supports the attempts of educational theorists to bring intelligence, emotion, and motivation into comprehensive relatedness. In general, behavior is treated as "an outcome of a person in a situation," and this subtle formulation appears consistent with the metaphysical analysis by John Herman Randall, Nature and Historical Experience, Chapter 6 (Columbia University Press, 1958). So far the underlying theory presented seems sound.

Furthermore, the book is well organized so the busy administrator and teacher can gather the gist of the suggestions for the improvement of school procedures by reading selected chapters. The provement of the leading concepts is given in two short introbackground of the leading concepts is given in two short introductory chapters. Also, a concise, but comprehensive, introduction precedes each of the five principal parts—group-relevant aspects of individual personality; member perceptions as a factor in subgrouping; valency composition and group problem solving; readigrouping; valency composition and group problem solving; readigrouping and characteristics of individual change; dynamics of ness for an experiment of the n

in groups meets the reader's concern. Teachers who wish to use projective-type exercises in studying their own pupils' reactions, particularly for subgrouping within a class, will find such materials in the appendices. Thus, this technical research is made available to the schoolman.

An experienced teacher will readily recognize the fundamental distinction made here between "the work aspects of group operation [which] are the consciously determined, deliberative, reality-bound, goal-seeking aspects" and "the emotional preoccupations of the groups [which] are nonpurposive, 'instinctual,' and not under conscious control" (p. 13). Although the group leader's or teacher's aim to have the work aspects dominate over the emotional preoccupations sounds as though emotions were undesirable, it becomes clear that the ultimate objective is constructive integration in the group of emotionality and work. Likewise, the teacher will soon feel at home with the emotional modalities of fight, flight, dependency, and pairing, since individual pupils, subgroups, and whole school classes commonly exhibit such characteristics at various times. So this analysis of the vagaries of adult behavior in training groups, when compared with the behavior of children and adolescents in elementary and secondary schools, tends to relieve the anxieties of teachers. If teachers do not expect too much from their own ventures in the group dynamics field, they are likely to use the suggestions that apply to their conditions

A question might be raised whether in teacher-education programs preference should be given to more thorough preparation in psychology rather than to an interdisciplinary survey of group dynamics. Whether the itemized, somewhat mechanical analysis of individual behavior in the group offered by the group dynamics specialist is as helpful to the prospective or experienced teacher enlightened by the consideration of the problems of learning, should be carefully weighed. In this connection, we note as an their pointing to the necessity of "a more clinical evaluation of on total scores alone" (p. 33). Whatever answers are made to such problems of teacher education, schoolmen can be grateful to group

dynamics specialists for making clear the significance in learning of membership in the groups administered as school classes.

A few illustrations of the contributions inherent in this field are worth mentioning. The teacher can enhance personal development by helping learners to understanding of their own varying functions in the class group. Also, the teacher may come to appreciate and utilize the diverse emotional attitudes that occur in a group during the study of subject matter and the acquisition of skills. School administrators and college instructors can analyze their own leadership activities as well as appraise the effects of voluntary subgroups formed between the meetings of the group as a whole. Certainly, the Stock-Thelen volume has a multitude of suggestions for the educator who reads with an eye upon his own problems.

The reviewer's own interpretation of these pages is tempered by a high respect for the intellectual and ethical qualities to be found in the various members of the National Board of the Training Laboratories. While group dynamics, like other fields of inquiry, still calls for much further testing and research, as the authors themselves emphasize, this significant contribution to educational theory and school practice is worthy of careful consideration and

daily application.

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PUBLICATIONS RECEIVED

Alfred Adler. The Education of the Individual. New York: Philosophical Library, Inc., 1958, pp. 143.

Archie J. Bahm. What Makes Acts Right? Boston: Christopher Publishing House, 1958, pp. 207.

GEORGE DAVID BIRKHOFF AND RALPH BEATLEY. Basic Geometry. New York: Chelsea Publishing Company, 1958, pp. 294.

HERBERT BLOCH AND ARTHUR NIEDERHOFFER. The Gang: A Study in Adolescent Behavior. New York: Philosophical Library, 1958, pp. 231.

F. J. CAMM. Mathematical Tables and Formulae. New York: Philosophical Library, Inc., 1958, pp. 144.

Choosing Appropriate Techniques. Philadelphia: Curriculum Office, School District of Philadelphia, 1958, pp. 38 (paper).

Russell M. Cooper, Editor. The Two Ends of the Log: Learning and Teaching in Today's College. Minneapolis: University of Minnesota Press, 1958, pp. 317.

HERMAN LEE DONOVAN. Keeping the University Free and Growing. Lexington, Kentucky: University of Kentucky Press, 1959,

Education in Nepal: Report of the Nepal National Education Planning Commission. Kathmandu, Nepal: Bureau of Publications, College of Education, 1956, pp. 259.

J. ROSWELL GALLAGHER AND HERBERT I. HARRIS. Emotional Problems of Adolescents. New York: Oxford University Press,

HELEN HOFER GEE AND ROBERT J. GLASER. EDITORS. The Ecology of the Medical Student. Evanston, Illinois: Association of American Medical Colleges, 1958, pp. 262.

NEAL GROSS. Who Runs Our Schools? New York: John Wiley &

T. H. WARD HILL. Mathematics for the Layman. New York: Philosophical Library, Inc., 1958, pp. 343.

Percival W. Hutson. The Guidance Function in Education. New York: Appleton-Century-Crofts, Inc., 1958, pp. 680.

Instrumental Music: A Guide to Instrumental Instruction in the Elementary and Junior High Schools. Los Angeles County Superintendent of Schools Office, California, 1958, pp. 30 The Jastak Test of Potential Ability and Behavior Stability at the Junior High School Level. Minneapolis, Minnesota: Educational Test Bureau. 1958.

BERTRAM P. KARON. The Negro Personality: A Rigorous Investigation of the Effects of Culture. New York: Springer Publishing

Company, Inc., 1958, pp. 184.

Samuel A. Kirk. Early Education of the Mentally Retarded. Urbana, Illinois: University of Illinois Press, 1958, pp. 216.

George F. Kneller, Existentialism and Education, New York: Philosophical Library, Inc., 1958, pp. 170.

LEO KUPER, HILSTAN WATTS, AND RONALD DAVIES. Durban: A Study in Racial Ecology. New York: Columbia University Press, 1958, pp. 254.

WILBUR L. LAYTON. Counseling Use of the Strong Vocational Interest Bank. Minneapolis, Minnesota: University of Minnesota Press, 1958, pp. 40 (paper).

L. X. Magnifico. Education for the Exceptional Child. New York: Longmans, Green and Co., Inc., 1958, pp. 371.

VAN MILLER AND WILLARD B. SPALDING. The Public Administration of American Schools, Second Edition: Yonkers-on-Hudson, New York: World Book Company, 1958, pp. 605.

F. IVAN NYE. Family Relationships and Deliquent Behavior. New

York: John Wiley & Sons, Inc., 1958, pp. 168.

ARLEEN C. Otto. New Designs in Homemaking Programs in Junior High Schools. New York: Bureau of Publications. Teachers College, Columbia University, 1958, pp. 100.

CAROLYN A. SECHREST. New Dimensions in Counseling Students: A Case Approach. New York: Bureau of Publications, Teachers College, Columbia University, 1958, pp. 119.

JEROME M. SEIDMAN, EDITOR. The Child: A Book of Readings. New

York: Rinehart & Company, Inc., 1958, pp. 675.

Tom Slick. Permanent Peace: A Check and Balance Plan. Englewood Cliffs, New Jersey, 1958, pp. 181.

EDWARD A. SUCHMAN, JOHN P. DEAN, AND ROBIN M. WILLIAMS, JR. Desegregation: Some Propositions and Research Suggestions. New York: Anti-Defamation League of B'Nai B'rith, 1958. pp. 128 (paper).

Zoe A. Thralls. The Teaching of Geography. New York: Apple-

ton-Century-Crofts, Inc., 1958, pp. 339.

ROBERT M. W. Travers. An Introduction to Educational Research. New York: The Macmillan Company, 1958, pp. 466.

DAVID R. TURNER AND ALISON PETERS. How to Pass High on College Entrance Tests. New York: ARCO Publishing Company, Inc., 1958, pp. 256 (paper).

Hugh B. Wood. Readings in Education. Seattle: Cascade Pacific

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good teachers of the social studies, he found factors contributing to success and failure in teaching but no critical factors which always distinguished the activities of good from those of poor teachers

A monumental research in this area is the Commonwealth Teacher Training Study (2). The authors developed a check list of over one thousand items delineating the work or duties of the teacher.

Several studies (3) under the direction of Barr of the University of Wisconsin, in addition to the one previously mentioned, dealt with the measurement and prediction of teaching efficiency. Though no singular conclusions resulted from these studies, Barr felt that the felt that the data reported showed "interviews, autobiographies, and subjective and subjective are reported showed "interviews, autobiographies, and are reported showed "interviews, autobiographies, autobiographies, and are reported showed "interviews, autobiographies, autobiogra and subjective evaluations add something of importance to studies in the measurement and prediction of teaching efficiency."

Gould (4), evaluating the screening procedures used at the University of Pittsburgh, found the following correlations (over .50) of predictive many found the following correlations (over .50) of predictive measures with principals' ratings of in-service teaching success: grade in success: grade in success and in success and in success are didates ing success: grade in student teaching—.66, ratings of candidates by the School of Education Countries of Cou by the School of Education faculty—.64, and the American Council on Education Provided in Student teaching—.64, and the American Council on Education Provided in Student teaching—.64, and the American Council on Education Provided in Student teaching—.64

cil on Education Psychological Examination—.53. Durflinger (5), summarizing some thirty studies in predicting aching success are marizing some thirty studies in predicting teaching success, among other findings listed: (1) no agreement as to what makes as to what makes a good teacher, (2) high degree of intelligence is a necessary quality (2) a necessary quality, (3) teacher rating scales and teacher personality tests have here sonality tests have high correlation, (4) excellent teachers frequently deviate from quently deviate from norms in emotional stability, and (5) trait patterns of successful kinds in emotional stability, and those patterns of successful high school teachers are different from those of elementary tooch of elementary teachers.

Scates (6) thinks that developing criteria of teaching efficiency, ough difficult, is not developing criteria of teaching efficiency, be accomthough difficult, is not impossible, though it cannot be accomplished in terms of any impossible, though it cannot be accomplished in terms of any impossible. plished in terms of any single pattern of characteristics unless they are made very general are made very general.

Barr (7) and Keeler (8) are of the opinion that, since teaching primarily a leadership. is primarily a leadership rôle and dependent upon the nature of the situation in which the transfer and dependent upon the nature of the situation in which the teacher must function, its effectiveness can not be treated apart from the must function, its effectiveness that we not be treated apart from situations giving rise to it and that we need to know the situations giving rise to it and that

need to know the situational determiners of effective teaching.

Steinbrook (9) in teachers we have a steinbrook (9) in teachers we have the situational determiners of effective teachers we have the steinbrook (9) in teachers we have the steinbrook (9) in the stei Steinbrook (9) in an analysis of 90 elementary teaching teaching success record contrasting success records revealed that (1) student teaching contributed to success. (2) types of professional preparation was more important than number and kinds of college courses taken, (3) successful teachers showed wholesome and constructive attitudes toward children and toward professional activities and responsibilities, and (4) affiliation with professional organizations and participation in in-service activities of the school were associated with teaching success.

Mulry (10) made case studies of 35 elementary teachers who had graduated from the University of Pittsburgh. She found that subjective evaluations by university personnel of the personalities and teaching potential of these teachers at the time when the latter were undergraduates gave the most revealing indication of the probable later success or failure of these graduates.

NATURE OF THE PRESENT STUDY

In the remaining portion of this article an attempt will be made to describe an additional research involving factors that might be important in the selection of prospective teachers.

Pre-service records and certain in-service data of 108 graduates of Duquesne University, Pittsburgh, Pennsylvania, who had been teaching from two to five years in public elementary schools, were analyzed. The main purpose of this inquiry was to discover whether certain personal, social, or professional characteristics of candidates for teaching, traits which could be observable during the college years preceding teaching service, had value in predicting the candidates' future teaching success. In addition, certain data associated with the teachers' in-service teaching experiences were studied with a view to noting any relation of these to success in teaching.

PROCEDURE

The teaching effectiveness of each of the 108 graduates was determined through the use of the Beecher Teaching Evaluation Record (11). With this instrument three ratings were obtained for each teacher: (1) by the particular teacher's supervising principal or supervisor, (2) by the building principal, and (3) by one of the authors (Helen Kleyle). An average of each series of three ratings was then determined. This served as a criterion of teaching effectiveness.

In addition, the same three observers rated the teachers on seven

traits which had been evaluated also during the pre-service training period: (1) Personal appearance, (2) Health and vitality, (3) Coöperation, (4) Sociability, (5) Adaptability and resourcefulness, (6) Emotional maturity, and (7) Interest in teaching.

A structured interview with each teacher was carried on by one of the authors. At that time the teacher was asked to complete the

Minnesota Teacher Attitude Inventory (12).

Data for the graduates, relative to the following items, available among the university records, were studied:

(1) Personal appearance.

(2) Health and vitality.

(3) Coöperation.

(4) Sociability.

(5) Adaptability and resourcefulness.

(6) Emotional maturity.

(7) Interest in teaching. (8) Mental ability.

(a) Otis Quick Scoring Mental Ability Test.

(b) American Council on Education Psychological Exami-

(9) Academic achievement.

(a) Iowa Silent Reading Test

(b) Purdue English Test

(c) National Teacher Examination

1) Common Examination

2) Optional Examination—Elementary

(d) University Quality Point Average

(e) University Student Teaching grade Pre-service and in-service data for the twenty-five per cent (27 achers) ranking highest teachers) ranking highest were then compared with those for the twenty-five per cent ranking lowest. Differences in mean scores, the for the various measures, between the teachers ranking in the highest and lowest quarters between the teachers ranking in the highest and lowest quarters were determined. Where these differences were found to be a differences were found to be a difference were ences were found to be statistically significant, correlations were calculated for the option calculated for the entire group of 108 graduates between ratings on the various traits and teaching success.

FINDINGS

To what extent were pre-service and in-service records of those nked in the highest transfer and in-service records of those ranked in the highest twenty-five per cent of teaching competency different from those ranking in the lowest twenty-five per cent? First, consideration will be turned to in-service data bearing on the question: What are some distinguishing differences between superior and inferior teachers in service? Second, a study of preservice data, as found in the university records, will be made. An analysis of the latter information will seek an answer to the question: To what degree can teaching competency be predicted on the basis of certain undergraduate records of teachers in training?

A. Findings Based upon In-service Data:

- (1) No significant differences between teachers rated in the highest and lowest quarters of teaching efficiency were found for the following traits or records:
 - (a) Personal appearance
 - (b) Health and vitality
 - (c) Coöperation
 - (d) Attitudes toward children in school situations based upon the Minnesota Teacher Attitude Inventory
- (2) Statistically significant differences between the superior and inferior teachers were found for the traits listed below. Critical ratios of the differences and also correlations between the traits and teaching efficiency are given.

	Critical Ratios		Correlations
Emotional maturity	0.07(1% level)	• • • •	.45 .44 .54 .52
Interest in teaching	, , , , , , , ,		

As will be noted, the differences for the first two traits are significant only at the five per cent level.

- (3) Though 72 per cent of the 108 teachers were women and 28 per cent men, 85 per cent in the highest quarter of teaching competence were women and 15 per cent men; again, in the lowest quarter 81 per cent were women and 19 per cent men. Thus women predominated out of proportion to their numbers in both the highest and lowest quarters, the men tending toward the average rating.
- (4) A larger proportion of the men in the highest quarter belonged to social organizations.
- (5) A larger proportion of both men and women in the highest quarter had hobbies and recreational interests and also par-

ticipated more in professional activities, such as workshops and panel discussions.

B. Findings Based Upon Pre-service Data:

- (1) No significant differences between students later rated as superior teachers and those rated as inferior were found with respect to these traits or records:
 - (a) Personal appearance.
 - (b) Health and vitality.
 - (c) Coöperation.
 - (d) Sociability.
 - (e) Interest in teaching.
 - (f) Iowa Silent Reading Test.
 - (g) Grade in Student Teaching.
- (2) Statistically significant differences between the superior and inferior quarters of teachers were obtained at the preservice level for the following traits or records. Critical ratios and correlations also are included.

	11 - 12		
Adaptability and	Critical Ratios		Correlations
Adaptability and resourcefulness Emotional maturity Otis Quick Scoring Montal Adams	2.46(5% level)		.39
Otis Quick Scoring Mental Ability Test.	3.19(1% level)		.63
chological Franciscon Psy-	(-/U 10 VC1)		.25
Purdue English T	4 33/10/ 10-11		.29
National Teachers E-	4.34(197 lovel)		.39
National Teachers Examination—Op-	3.41(1% level)		.44
tional Examination Op- Quality Point Average	6 47/10/ 1 1		.45
			.32
A study of the ferr	3.00(1% level)	4 + 4 *	* = 0

data reveals:

(1) For both sets of data no statistically significant differences between teachers rated in the highest and lowest quarters were found with respect to (a) Personal appearance, (b) Health and vitality, and (c) Coöperation (a)

(2) In-service data alone showed statistical differences for (a) Sociability and (b) Interest in teaching. This finding might mean that the teachers had changed with respect to these traits since their undergraduate days

(3) Grade in Student Teaching was not discriminating; neither

was the Minnesota Attitude Inventory. Many investigators have found the student teaching grade a good predictive measure. That this situation did not obtain in the present study may be attributable to the fact that so many students received high grades in student teaching because critic teachers and supervisors tended to look upon average or lower grades as undesirable for a potential teacher.

(4) Both in-service and pre-service data indicated significant differences between good and poor teachers relative to (a) Adapta-

bility and resourcefulness and (b) Emotional maturity.

(5) All of the listed standardized tests given during the undergraduate training were discriminating with the exception of the Iowa Silent Reading Test.

(6) Quality Point Average, usually associated with success,

was found to be predictive but not to the extent expected.

Using correlations determined in the study, a maximum coefficient between certain predictors and teaching efficiency was determined. Four factors were found to be most predictive, the remaining ones failing to augment the coefficient. A multiple coefficient (corrected for chance errors) of .7593 was found between four factors and teaching success. These four best predictive measures were:

(1) Emotional maturity.

(2) The National Teachers Examination—Optional Examination.

(3) The Purdue English Test.

(4) Students' Quality Point Averages at the university.

REFERENCES

(1) A. S. Barr, Characteristic Differences in the Teaching Performance of Good and Poor Teachers of the Social Studies, Public School Publishing Co., 1929.

(2) W. W. Charters and Douglas Waples, The Commonwealth Teacher

Training Study, Chicago, University of Chicago Press, 1929.

(3) A. S. Barr, R. E. Gotham, et al, The Measurement of Teaching Ability, Madison, Wisconsin, Dembar Publications, 1945; Leo J. Lins, "The Prediction of Teaching Efficiency;" Herbert Von Haden, "An Evaluation of Certain Types of Personal Data Employed in the Prediction of Teaching Efficiency;" Ronald D. Jones, "The Prediction of Teaching Efficiency from Objective Measures," Journal of Experimental Education, XV, September,

(4) George Gould, "The Predictive Value of Certain Selective Measures,"

Educational Administration and Supervision, XXXIII, April, 1947, pp. 208-210.

(5) Glenn W. Durflinger, "A Study of Recent Findings on the Prediction of Teaching Success," Educational Administration and Supervision, XXXIV, October, 1948, pp. 321-336.

(6) Douglas E. Scates, "The Good Teacher: Establishing Criteria for Identification," Journal of Teacher Education, I, June, 1950, pp. 137-141.

(7) A. S. Barr, "The Measurement of Teacher Characteristics and Predictions of Teaching Efficiency," Review of Educational Research, XXII, June, 1952, pp. 169-172.

(8) Harold J. Keeler, "Predicting Teacher Effectiveness of Graduates of a New York State Teachers College," Unpublished Doctoral Dissertation,

University of Indiana, 1956.

(9) Roy S. Steinbrook, "Study of Some Differences in Background, Attitudes, Experiences and Professional Preparation of Selected Elementary Teachers with Contrasting Local Success Records," Unpublished Doctoral Dissertation, University of Indiana, 1955.

(10) June Grant Mulry, "Descriptive Case Studies of Thirty-five 1950 Elementary Graduates of the University of Pittsburgh," Unpublished Doctoral Dissertation, University of Buffalo, 1956.

(11) Dwight E. Beecher, The Teaching Evaluation Record, Buffalo, New York, Educators Publishing Co., 1953.

(12) Walter W. Cook, Carroll H. Leeds, and Robert Callis, Minnesota Teacher Attitude Inventory, Psychological Corporation, New York, 1952.

SOME CONSIDERATIONS REGARDING FULL-TIME COUNSELOR VERSUS TEACHER-COUNSELOR ASSIGNMENTS

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Public-school guidance has been undergoing a period of rapid development during the last decade or two. The counseling and guidance provisions of the National Defense Education Act give every indication that the rate will increase during at least the coming decade. Within approximately two years about 60 university and college counselor-training institutes will have been completed. If the mean number of students per institute is 25, a total of approximately 1500 new certified counselors will be available and assumedly will be employed by public schools. Similar institutes will be held during each of three additional years. Roughly speaking, then, by the end of 1965 there will be a minimum of 6000 additional public-school counselors available through this program alone.

This addition to the ranks of professional education gives added emphasis to the question of the merits of full-time counseling assignments as opposed to teacher-counselor assignments. If existing organizational systems for guidance programs are any indication, it is clear that secondary-school administrators do not agree on the relative merits of full-time counselors as opposed to teacher-counselors. Small schools, of course, have little if any choice in the matter, and must employ a teacher-counselor if they are to provide counseling for their students. Large schools, however, do have a choice, and it is not difficult to find illustrations of well-organized programs of teacher-counselors, full-time counselors, and combinations of the two systems. While some guidance programs appear to have "just grown", many schoolmen have a definite rationale for their particular organizational system. Some of the more traditional rationale for the two types of organization are described below.1

¹A basic assumption necessary to the following discussion is that counselors, whether full-time or teacher-counselors do in fact devote part of their assigned guidance time to *counseling* per se.

THE TEACHER-COUNSELOR POINT OF VIEW

The extreme teacher-counselor position is epitomized by the "every teacher a counselor" point of view. Essentially, this view holds that counseling specialists are not needed because adequate teaching, by definition, involves counseling and other guidance activities. It is not that guidance activities are rejected, but rather they are in great part equated with and subsumed under teaching.

A less extreme point of view recognizes some real differences between counseling and teaching, but holds that the teacher, because of his classroom contacts and opportunities for observing student behavior, is the logical professional person to provide counseling. A slightly different position maintains that most guidance services are best provided by teachers, but assigns selected duties to specialized guidance personnel. In addition, it is believed that the sine qua non of effective counseling is a thorough of appraisal instruments, teachers' observations serve as the major source of information about individual students and thus teachers are the logical personnel to perform the counseling function.

In regard to counseling load, many teacher-counselor advocates would hold that two teacher-counselors, each with one half of their time assigned to counseling and each with responsibilities for 200 counselees, would be more effective than one full-time counselor responsible for 400 students. This contention would be based the smaller the counseling load the greater the counselor's knowledge of his counselor.

The reasons supporting the teacher-counselor system mentioned so far pertain primarily to counselor-student relationships. Advotionale for their position. These are concerned more directly with school personnel and to parents. From the belief that the counselor needs to "know" his school, his fellow teachers, and parents in reason that the teacher-counselor is in a better position to develop It is thought that better intra-school public relations are possible sponsibilities. Further, it is held that guidance can be more closely

integrated with curriculum when counselors are also teachers. Similarly, teacher-student-parent-counselor conferences are less complex, and more effective when the teacher is also the counselor.

Finally, it is argued that the teacher-counselor system inhibits the development of a "specialists" group in education which might lose sight of the major objectives of the total educative process.

THE FULL-TIME COUNSELOR POINT OF VIEW

There are several traditional kinds of rationale supporting the full-time counselor position. The first has to do with divisions of responsibility between teaching and counseling duties. Advocates of the full-time counselor plan would argue that while teaching and counseling are in many ways similar, they are also different in many important respects. These differences, they would maintain, frequently have several effects. Most teacher-counselors will have either teaching or counseling as a primary interest, and because of their heavy work loads will devote more than an appropriate amount of time to their preferred activity and thus neglect some of the responsibilities of the less favored activity. Under the full-time counselor arrangement this situation is avoided. Another argument stemming from the division of responsibility states that the authoritarian rôle which is necessarily a part of teaching, is at the same time inconsistent with the philosophy and principles of counseling. The teacher-student relationships established, it is held, often prevent the development of effective counselor-counselee relationships. Students need to know what to expect of the counselor (and the teacher) and for some students the same person playing alternate rôles would seem inconsistent and lead to an attitude of distrust.

Advocates of the full-time counselor plan feel that the counselor's schedule must be flexible. A division of responsibility, they believe, limits the flexibility of the counselor's schedule, besides adding an unnecessary variable to the already complex problems of developing student schedules.

A second kind of argument advanced by those in favor of fulltime counselors is concerned with making the most economical use of professional personnel. Because counselor certification usually requires specialized graduate study of approximately one year (most often beyond teacher certification requirements) it makes poor economical sense to assign teaching duties to certified counselors. In some states less rigid certification requirements have been established for teacher-counselors. The full-time counselor advocate would argue, however, that the limited certification requirements involved represent a confusion between quality and quantity of counseling. They would maintain that such certification is inadequate because it is only quantity and not quality which should discriminate between teacher-counselors and fulltime counselors.

A related notion regards practicing the art of counseling. Because counseling is partly an art, it is argued that given a certain level of academic preparation, there is a positive relationship between counseling experience and counseling competency. It follows that full-time counselors will become more effective at a more rapid rate than teacher-counselors.

A closely related contention held by advocates of full-time counselors pertains to the collection and understanding of environmental information (i.e. information about occupations, scholarships, local labor needs, etc.). It is held that any counselor, be he full-time or a teacher-counselor must devote a certain amount of time to keeping currently informed about environmental information. Because the amount of time necessary to keep informed has only a slight relationship to total counselee load, considerable counseling time is wasted when teacher-counselors must devote part of their already limited counseling time to this

A final rationale offered by full-time counselor advocates is that schools offering full-time counseling positions will attract the more capable counselors available.

THE IMPORTANCE OF JOB ORIENTATION

To this point the purpose has been to describe some of the more important traditional reasons advanced by those in favor of teacher-counselors and full-time counselors, respectively. If a bias has been detected by the reader, it was not the writer's intention. The various rationale presented are important and the administrator should consider them all when developing a guidance policy for

What follows, then, is not offered as an alternative rationale for deciding which type of guidance organization to use. It is, rather, a discussion of a second a discussion of an additional factor which needs to be considered.

The factor is that of job-expectation, or in a broader sense, job orientation. Very briefly, job orientation refers to the perceptions and feelings that an individual has about his occupation. Various factors go into the development of an individual's general job orientation. One type of factor pertains to the non-monetary expectations that one has about his job. Partly, this has to do with prediction. That is, an individual learns that when he behaves in certain ways in his work he can expect certain things to happen with some general level of probability. Another aspect of job expectation involves the learning of various needs and methods for satisfying these needs. With regard to higher level jobs, at least, (such as teaching and counseling) the individual is most effective when his job expectations are realized.

When most counselors came directly from the ranks of teachers and had little or no specific counselor preparation, job orientation was of little importance to the problem under consideration. However, in light of the increasing numbers of professionally prepared counselors, and with an even greater number predicted for the immediate future it is suggested that an adequate decision regarding the question of full-time counselors versus teacher-counselors cannot be made without including job orientation as one of the impor-

tant criteria.

Several points of comparison between the job expectations of teaching and counseling, respectively, can be listed. For example: size of student groups, frequency of contact, signs of effectiveness, extent of responsibility for student decisions and behavior, extent to which answers are to be provided, extent of familiarity with students desired, and extent of acceptance of all students.

Job expectations in terms of these considerations suggest, in the writer's opinion, that some rather systematic differences exist between the job expectations of counseling as opposed to those of teaching. More important, these differences present real conflicts to the teacher-counselor; conflicts which inhibit both his teaching and his counseling efforts. Consider the following general illustrations. The teacher expects frequent contact with each student in relatively large groups, and as a result develops certain job expectations. The counselor, on the other hand, learns to expect infrequent contacts with individual students and relatively small groups of students. He also develops certain job expectations, often different from those of the teacher (e.g., scope of attention

to a given student, amount of participation within a student contact, etc.). Because effective job behavior is related to job satisfaction, a conflict of job expectations influences the job satisfaction and thus the job behavior of the teacher-counselor.

The teacher expects and depends upon short-term signs of student progress in terms of content achievement. The counselor, of course, does not depend upon achievement and can seldom observe immediate signs of progress in counseling. The teacher-counselor can easily become frustrated about his counseling efforts when he transfers his sign of progress expectations from teaching to counseling.

The teacher is expected and finds it necessary to make certain decisions for students, and to reward and punish them for their behavior. While the counselor's behavior cannot avoid having some incidental reinforcing influence on the counselce, the counseling relationship is in no way based on an extrinsic reward system, and the counselor assumes no decision-making responsibilities for the student. The teacher-counselor may find the necessary

flexibility difficult to achieve.

Finally, the teacher, while having a responsibility to teach all students, need not carry this responsibility to a completely empathetical acceptance of each class member. Indeed, many teachers find acceptance to this degree a definite hindrance to effective teaching. Such is not the position of the counselor. While he occasionally may find a counselee completely unacceptable, he expects to offer unrestricted acceptance to his counsclees. It is inconsistent to think in terms of varying areas of concern and degrees of acceptance with different counselees. Again, the teachercounselor will likely find such flexibility difficult to achieve.

What has been said is not meant to categorize counselors as characteristically warm, sensitive friends of students, and teachers as acid, and teachers are acid, and the acid, ers as cold, aloof authoritarians. Obviously, this is not the case. To reiterate, the job expectations of counseling and the job expectations of total tations of teaching involve certain basically important differences. These differences in job expectations do not preclude a workable formal division. formal division of responsibilities between teaching and counseling for an individual prepared in both areas. But they do suggest that an individual an individual assigned to play both professional rôles will experience real confidence to play both professional rôles will experience real confidence these ence real conflict in terms of his job expectations, and that these conflicts will inhibite. conflicts will inhibit his counseling or his teaching or both. Specifically, the teacher-counselor who is primarily job-oriented in terms of teaching will find it difficult to function effectively as a counselor.

This paper has attempted to point up the increasing need for school administrators to examine their views regarding the merits of teacher-counselor and full-time counselor assignments, respectively. Several traditional rationale held by advocates of both systems have been reviewed. From the observation that an increasing proportion of counselors have specific training in counseling and guidance, it was suggested that the factor of job expectation, or more generally, job orientation, now needs to be included among the basic criteria of such an examination. It was concluded that the conflicts in job expectations between teaching and counseling are such as to inhibit the work of the individual assigned to play both professional rôles.

ORGANIZED LABOR AND THE SCHOOL CURRICULUM

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School administrators and curriculum specialists should strive to understand the rôle of Labor in education and endeavor to work with organized labor, as well as with other groups, toward improving educational programs. In the past the climate of organized labor-educator relationships has generally been one of mutual suspicion of motives, thus obviating effective teamwork. Neither education nor Labor can afford a continuation of this situation of mistrust and isolation if optimal achievement of educational aims is to be realized. Initiative must be taken by administrators and other educational leaders to understand the viewpoints and rôles of all aspects of the American society—and this especially includes a better understanding of organized labor. As educators learn more about the labor movement and its stand on educational matters, the two groups, Labor and education, will surely work together more harmoniously and profitably. Such coördinated efforts are becoming increasingly important since educational progress and a dynamic American society are contingent upon these mutual un-

Throughout its history Labor has favored a broad, realistic, and enriched curriculum for public education, and has believed that the gulf between education experiences and life experiences should be narrowed and merged into a unified and meaningful totality. An examination of Labor's educational policies follows to discern whether or not such a course of action has been actively and pur-

Labor has been concerned with an impartial synthesized point of view in the social subjects and has voiced an opinion that the textbooks used in teaching history, civics, and sociology should present an impartial and truthful picture of the contributions of all major institutions including the contributions of organized labor. Also, a functional curriculum has been emphasized for both youth and adults since this kind of a curriculum will enable students to more easily make the transition to the working force as well as to become more efficient workers.

There has been a call for a broadening of the curriculum, including changes in the curriculum of the public schools, that would provide education for creative living for those who expect to earn their living in industrial employment. Far from desiring to narrow any educational program, Labor has proposed that broad high school curricula should be organized to provide for all pupils, regardless of vocational choice.

From a review of such primary sources as reports of annual convention proceedings and articles appearing in the *American Federationist*, it will be found that organized labor has not been entirely satisfied with the public education curriculum, but has occasionally assumed the rôle of a critic. It has pointed out areas needing improvement and has made general recommendations, but has insisted that details of curriculum construction should be left in the hands of professionally trained individuals.

There has been opposition to prescription or proscription of curricular experiences by Federal, state, or local legislation, as well as resistance to censorship of the curriculum by special interest groups. Organized labor has insisted that the curriculum be unfettered, thus assuring objectivity of presentation without fear of reprisals. This stand is closely related to academic freedom, which

Labor has strongly supported for many years.

Although teaching of the skill subjects has received little criticism, educators have been criticized for not offering a curriculum sufficiently diversified to meet the varied needs of all students. Educators have been criticized for failing to relate cultural education to the problems of life in an industrial society. Some doubt in the ability of present-day leaders of education to make the necessary changes in the education program as the society changes has been expressed. This doubt has been based primarily on a belief that educators are sympathetic toward leaders of industry. On occasion educators have been accused of having contempt for manual laborers. For these reasons all censorship of curricular materials by law or by pressure groups has been condemned, and faith expressed in the professional judgment of the classroom teacher for the best selection of the materials and methods for optimal instruction.

The social and economic advancements for workers through the organized labor movement have been based on the research findings of the social sciences. The conceptual tools of the social sciences, especially those pertaining to the democratic process, have had more long range effectiveness in winning labor reform than has the more drastic weapon—the strike, thus accounting for Labor's emphasis on the social studies rather than on the more strictly vocational phases of the public school curriculum.

Natural sciences, on the other hand, have been stressed for two major reasons: (1) because they emphasize freedom to seek the truth, which is required in management-labor relations, and (2) training in the basic natural sciences and the scientific method is necessary if workers are to adapt readily to the changes in indus-

try brought about by scientific progress.

Cultural subjects have been recommended for the approved curriculum because Labor wants the working man to have a greater variety of satisfying experiences during the leisure time made available through labor accomplishments in reducing working hours. Also, physical education and health programs have been recommended for inclusion in the curriculum in accordance with Labor's policies calling for development of comprehensive public health measures for both adults and children.

Military training is not a part of Labor's endorsed public school curriculum because it is held that it hinders the development of free-thinking, democratically-minded citizens. Labor does not want the minds of children subjected to the influence of unquestioned decisions of "superiors" and the inflexible commands of military discipline because it is held that these aspects are contrary to an atmosphere of freedom required to objectively search

Organized labor has feared that control of vocational education would pass into the hands of educational administrators subservient to business and industrial leaders. Vocational aspects of the curriculum have been criticized for developing specific industrial skills instead of general skills of a more pre-vocational nature, contrary to Labor's desire for a generalized vocational training which it desires as an essential part of general education. Labor has looked askance upon using the public school to compete with training on the job in industrial plants or with the union-industry apprenticeship programs. Any public school vocational program that provides services, manufactured articles, or cheap labor in competition with organized labor has not been favorably received. Labor has believed that educators, industrial representatives, and labor leaders should coöperate in developing the vocational curriculum, but with an emphasis upon general rather than specific job skills.

Evidence from American Federation of Labor-Congress of Industrial Organizations publications clearly demonstrates that there has been support for a broad and rich curriculum built around the social studies. With social studies as the core, their recommendations have called for an extremely broad general education which includes skill subjects and natural sciences, physical and health education, aesthetic experiences, and a jointly planned vocational education. This constitutes in fact a comprehensive program of generalized life experiences, and is in agreement with accepted educational philosophy as well as in support of it.

During the period following the *Sputnik* scare many old and some newborn critics of American education engaged in extreme vituperations directed toward educational leaders and demanded a complete redirection of curricular trends with major concentration upon the natural sciences, advanced mathematics, and foreign languages. Organized labor continued to maintain a moderate view as illustrated by testimony presented during Congressional hearings for the National Defense Education Act of 1958.

Statements by representatives of the AFL-CIO during these Congressional hearings revealed the following viewpoints toward education for the future. The program must include all levels of education, since the needed assistance to colleges and universities can only have meaning to the degree that public elementary and secondary pupils acquire more and better education. This in part results from application of our best knowledge and resources for curriculum development. At the turn of the century children were taught what they needed to live in their small community. Today our community is the world, and it is beginning to expand beyond that, to include some of the infinite confines of space itself. Citizenship thus requires a tremendously broader education than anything needed heretofore.

Labor believes that all children of today must learn basic knowledge about the physical and political worlds, as well as about the three R's, for only such knowledge can assure the sur-

vival and advancement of our civilization. In addition, an opportunity for advanced work must be extended to all of the most able

ones in keeping with fundamental tenets of democracy.

Vitally important as are science, mathematics, and languages, Labor contends that a democracy must not exclude the social sciences, professions, and communication skills. Historians, economists, lawyers, social workers, producers, and writers are all needed to promote the best interests of this country. Understandings and a sense of values are critical requirements of a people who have suddenly acquired tremendous world responsibilities.

Able students should be steered into the challenging courses for which they are fitted, instead of drifting into easy courses. However, Labor believes that students of low ability should be kept out of difficult courses, since they tend to pull down the level of

instruction below that appropriate for the able students.

There is also an interest in the provisions for technical training, including some instruction for apprentices. Labor holds that men at the drafting boards and in the laboratories need high level academic training for carrying out difficult production jobs. Also, since skills become obsolete quickly, an adequate plan for training and retraining all types of labor is a necessary curriculum

Summary. Labor endorsed public school curriculum is built around a social studies core, includes generous experiences in utilizing the scientific method in the study of the concepts of the natural sciences, is diversified and differentiated to provide for students of varied interests, and provides general education broadly conceived to include even the vocational aspects of life. The curriculum, from kindergarten through college, meets the needs of the students and of life, and is based on generalized life experiences of the American democratic society in its economic, social, and political phases.

A GENERAL EDUCATOR LOOKS AT AN AAAS CONFERENCE

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What can the general educator gain from attending an annual conference of the American Association for the Advancement of Science? With this query in behalf of those school people who are not specialists in any of the highly selective scientific fields, the writer dipped into the comprehensive offering of the 125th meeting of the Association, held in Washington, D. C., December 26–31, 1958. Let us say at once that among the thousand discussions we found more than adequate sustenance for the non-specialist.

For example, in one session of Section Q, the AAAS Section on Education, Paul Witty of Northwestern University summarized his nine-year research on the attitudes toward TV of children, their parents, and their teachers. The evidence shows that the many desirable features and potentialities of television can be promoted by able guidance in school and home based upon an upto-date awareness of the medium's limitations. Getting still closer to the schooling process itself, Daniel Tanner of the San Francisco State College critically evaluated recent projects in classroom TV instruction, pointing out certain misleading assumptions in the currently promulgated appraisals of economy and of pupil learning through TV. Following these reports in a concentrated area, William Bristow of the New York City Public Schools gave a broadly philosophic and highly inspiring affirmative answer to the question: Can research provide a design for a quality product in education? Each of these representative presentations had its own significant message to teachers at every level as well as to administrators and teacher-educators.

Later sessions of Section Q devoted to studies of retarded and gifted children, and to such topics as "the development of criteria of success in school administration" and "participation and leadership of public school teachers in community organizations," also offered fruitful ideas to the thoughtful non-specialist.

In a joint session of Section Q with the American Educational Research Association, William Kvaraceus, Director of the NEA Juvenile Deliquency Project (on leave from Boston University), made an acute psychological analysis of our current delinquency situation as well as indicating the procedures of the present study, which will be publishing its conclusions within the year. Coming from the West Coast, Harold Carter, University of California, Berkeley, described a broadened base for the prediction of school achievement through a student's self-report inventory, known as the California Methods Survey. As with other presentations, discussion from the floor and pertinent questions added to the significance of the report. In the same session, Ray Maul, of the Research Division of the NEA, called our attention vividly to the serious reduction in the educational qualifications of college and university instructors, especially in mathematics and science, due in part to competition of professional opportunities outside of teaching. These three brief addresses typify the stimulating, upto-date impact of the conference as a whole.

Actually, concurrent joint sessions of Q and AERA permitted a choice between the studies just mentioned and those of Van Cleve Morris, Rutgers University, on an existentialist view of educational theory; of Franklin Stump, Elizabethtown College, on moral concepts and correlates; and William Cooley, Harvard University, on attributes of potential scientists. Other sessions included discussion of the cost-of-education index, estimates of public school expenditures in the decade ahead with implications for public relations, and the gross measurement of the quality of a

Joint sessions of Section Q with the Council for Exceptional Children threw light upon the treatment of many children found in public school classes. These studies included the multiple handicapped, the mentally retarded, and the emotionally disturbed. The principles discovered through the study of these very extreme cases can often be applied to the less extreme difficulties the teacher and administrator daily meet.

Likewise, many of the problems being attacked by the National Science Teachers Association reach out into far corners of the educational scene. For example, the panel on the recognition and development of the intellectual resources of youth, led by Charles Bish, Director of the Academically Talented Pupil Project of the NEA, developed procedures useful to every teacher. The implications for science teaching at the elementary, secondary, and college levels, as treated in another session, offered many suggestions for the teaching of other subjects at the various age levels.

Again, the offering of the AAAS is broadened by including social science, particularly the American Sociological Society. As schoolmen are aware, the professional education of teachers has been favorably affected by the work of such distinguished sociologists as William Ogburn, Talcott Parsons, Kingsley Davis, and August Hollingshead, all of whom appeared on this 1958 program. Here was an unusual opportunity to be in close touch with leaders in a field that contributes continually to policy making in our schools. In this connection, Margaret Mead brought forth the anthropological view in an address, "On Bringing up Children in the Space Age," to the Ladies Luncheon, one of the special events arranged for women. Thus the AAAS hints to the men that their wives are especially welcome. When referring to the anthropological-sociological aspects it might be added that the inclusion in the program of persons from many disciplines, cultures, and races actually exemplified in a practical way certain attitudes that have been strongly supported by social science studies and by the general, scientific, experimental principle of welcoming new ideas from all available sources.

Going beyond the professional interests of scientists and schoolmen, the AAAS program has a rich cultural impact. Tours of general interest, such as our cousins of the British Association so amply provide, were organized, among which was one to the National Institutes of Health. Also, the large-scale exposition of science and industry opened a most up-to-date cultural opportunity to the whole family. Scientists' families from all over the United States were sharing excitedly in glimpses of the dazzling future of science. Another family affair was the annual lecture and film of the National Geographic Society, "Winter at the South Pole," given by Paul Siple. Notable also was the evening address on "Science and Public Policy," by James R. Killian, Jr., Special Assistant to the President of the United States for Science and Technology.

It goes without saying that the science teacher at any level can scarcely make a more profitable investment of time, especially since the program offerings are so rich, varied, and significant to anyone—specialist or non-specialist, who wants to keep alive in his time. These samplings from the 1958 program suggest why the writer is heartily recommending to his general education colleagues the post-Christmas sessions of the AAAS of 1959 in Chicago and of 1960 in Philadelphia.

ARE TEACHERS "DOORMATS?"

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At the close of his book, Man for Himself, Erich Fromm poses what is for him a crucial aspect of the general problem of morality for to-day's world. The crux point is concerned with man's attitude

toward force and power.

Fromm's thesis runs in this manner: "Man is capable of knowing the truth and he is capable of loving, but if he—not just his body, but he in his totality—is threatened by superior force, if he is made helpless and afraid, his mind is affected, its operations become distorted and paralyzed." (1) He goes on further to say that the paralysis results not only from fear but from the implicit "promise" that the weak will be taken care of by the powerful. By submitting to this threat and promise man loses his power—his potential for realizing himself.

An analysis such as this, granting its theoretical nature, should cause those engaged in teaching, on any level, to stop and think. What are the facts of the situation? What kinds of attitudes do teachers have concerning authority? What kinds of feelings do they convey to their students about the threat of power? How do they react when confronted with what they perceive to be rebel-

liousness on the part of their classes?

A host of other questions can be raised. The point is that teachers, by the very nature of the classroom situation, mold attidudes toward authority and power. These subjects are rarely the focus of class discussion. They don't have to be for students learn quickly enough the way in which a teacher perceives authority by the way he uses that authority which is invested in him. The learning that takes place in this area is probably as long-lasting as any that takes place in the schools or colleges.

In an effort to probe this area further the writer engaged in an informal study with some of his students during the course of the last academic year. These students were all in-service teachers taking an elective course on the graduate level. The aim of the study was to gather information concerning how individual teachers perceived the way "teachers as a group" felt about authority,

represented in either the school administration or the public. Those who took part in the study (a total of eighty-six elementary and secondary teachers) were asked to respond to an "openended" statement concerning the extent to which they saw the teaching group as being pliable, submissive or willing to stand up for what they believe in the face of authority. After they completed their reaction they were asked to rate themselves in regard to how similar or dissimilar they saw themselves compared to what they had written.

Of the eighty-six responses, nine proved to be unscorable because the questioning statement had been misunderstood or misinterpreted. The results of the remainder of the responses proved to be rather startling for this writer. A total of 78 per cent of the teachers (sixty responses) indicated that they thought that teachers as a group were too pliable and submissive in the face of authorityand some of the supplementary comments were rather harsh in nature. In addition, 50 per cent of the people who perceived teachers in this light said they saw themselves as being similar to their perceptions of the teaching group. That is, they felt that they themselves were too pliable and submissive.

Further content analysis of the responses gave some interesting insight into their feelings. The most mentioned factor that might account for such perceived teacher behavior was a generalized fear syndrome—fear of losing job status, of criticism, of incurring disfavor, of change. A number of people indicated that these reactions of fear led to many covert expressions of dissatisfaction in small groups outside the reach (hopefully) of administrative ears. Several other responses (undoubtedly written by men) expressed the feeling that this widespread perception of submissiveness on the part of teachers was due to the large number of women in the profession, the thought being that women are not as apt to push their ideas when confronted by authority (represented mostly by

Other reasons given as being causal to the perceived state of affairs are as follows:

(1) Teachers are apathetic.

(2) The "professional status" of teaching is inhibiting. Forceful behavior may be looked on as undignified or unethical.

(3) Teachers have been crushed by administrators so often that they just crawl back into their shell.

(4) Teachers have learned that it doesn't do any good to stand up and be counted. Those who do just sacrifice their popularity and their friends. They are seen as troublemakers and upstarts.

(5) Teachers are victims of an inferiority complex. They feel

their actions must have approval by the powers that be.

Some Implications. Before drawing implications from the above data we must, first of all, acknowledge that the sample studied here was not representative of the entire teaching profession. We must also point out that this study did not take the form of a rigidly controlled scientific experiment, although it did support the writer's previous empirical experience and those of his colleagues. These things notwithstanding, the ideas presented should give reason for thought and a great deal of further research.

While we have not said that teachers are submissive and fearful of authority, we have indicated the possibility (probability?) that a large majority of teachers do perceive the members of their profession as behaving in that manner. Although we are dealing on the perceptual level these perceptions are real for the people involved. They play no small part in influencing teacher be-

havior both inside and outside the classroom.

If further research bears out in fact (and this writer feels that it will) the perceptions that have been expressed—and if Erich Fromm's theorizing carries validity—there would seem to be some rather compelling implications for administrators, classroom teachers and for those people involved in teacher-training. Let

us look at a few examples:

(1) It is quite unlikely that school administrators look at themselves as people who engender fear among their faculties. There are few people who would care to hold this perception of themselves. It is much more pleasant to conceive of one's self as a person who works on a friendly, coöperative basis with others. Yet, if fear of authority does pervade a school atmosphere, the attempts at coöperative decision-making and effective faculty-administration consultation become a "going through the motions." For who wants to give serious thought to the solution of problems when people are afraid that if they disagree on an issue this will be seized upon by the principal as evidence of disloyalty or subversion? In addition, as we have come to learn the importance of a thoroughgoing communications network in an institution, so we have also learned about the inhibitory effects

that the threat of authority can have on one's ability to receive and pass on communications accurately.

These and other forces culminate in influencing faculty morale. In staff situations where fear is the dominating interpersonal factor we are likely to see much individually-centered behavior aimed at pleasing the authority figure, at isolating and insulating one's self from him, or a high rate of turnover focussed on escape.

(2) If great numbers of teachers do behave in the manner that some of their colleagues think they do, then we are faced with the inevitable conclusion that there will be a carry-over into the actual teaching situation and into teacher-teacher relationships.

The results in the classroom would seem to be concerned with the psychological phenomena of compensation and projection. For example, a compensatory reaction from one who is dominated by fear of authority is that he, in turn, will dominate others if he can. What better opportunity is there than the classroom with its built-in teacher-pupil authority relationship? Will such teachers tolerate creativity and freedom of thought if it differs from their own ideas? Hardly likely, it would appear. What seems to happen ultimately is that teachers succeed in projecting and transferring their own feelings about authority on to the students. The students soon learn that it is easier to get along by not differing from their teacher's ideas. By the time they graduate from high school—and most certainly after four years of college—many of our young people have learned that it is better not to strike out against authority. Do not be different. Think as you are told to think. You will be taken care of.

There are no course outlines aimed at teaching this. There don't have to be. The attitudes communicate!

In regard to teacher-teacher relationships in a climate of fear, what happens is probably that which is most obvious. We have which maintain themselves according to the satisfactions the group become suspect. "Apple-polishers" are much in evidence. The emphasis of faculty life becomes accommodation to the situation, or leaving it, if possible, but not working to improve it, in any

(3) The implications of the foregoing thoughts for teacher-

training are readily apparent. What kind of people do we want our teachers to be? What attitudes and values do we want our teachers to hold? How can we teach these attitudes and values if, indeed, they can be taught? What kind of people are we who purport to teach others how to teach?

Perhaps the last point is the most essential one. Are college instructors in education merely degree-laden copies of what may constitute a majority of teachers, professing one set of values but behaving another? Or, are they really something different? The hunch of this writer is that far too many are members of the former group, a situation which can only serve to reinforce and perpetuate that which already exists.

It may be that what has been said in the preceding paragraphs is too extreme. Certainly, more evidence is needed to paint a clearer picture. Further, the intent has not been to lay the blame for the world's moral problems at the feet of our teachers and school administrators. But, as a result of being interested in the problem, of being one who teaches teachers, and of talking with colleagues, teachers and students, this writer is convinced of the following:

(1) The nature of the interpersonal relationships, particularly in regard to feelings about authority, that exist among many school faculties are such that serious inhibiting behavior results—behavior that affects morale as well as teaching.

(2) This problem calls for careful study and planned change. In a sense, this article is a plea to administrators, teachers and teacher-trainers to start this study and change. It will not be an easy thing to do. It will require energy and be time-consuming. It will be met by much resistance. But the potential outcomes of such study and change for improved human relationships, faculty morale and better teaching leave little room for alternatives.

REFERENCE

(1) Erich Fromm, Man for Himself, New York, Rinehart & Co., Inc., 1947, p. 246.

ELIMINATE GUESSWORK IN ASSIGNMENTS TO SPECIAL CLASSES

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There has been a tremendous increase in the number of special classes for exceptional children established in recent years. However, the assignment of students to these classes has too often been based on inadequate diagnoses of the youngsters assigned.

A few actual cases of special class placement may be revealing in this respect. In a school system which accepted the obligation of providing formal special classes for educable retardates, clinicians who were re-examining the entire group discovered a boy of thirteen, relatively average in behavior and appearance, IQ 97, but reading performance level at second grade, numbers skills at second-grade level, evidence of appreciable visual difficulty in depth perception and fusion at near point (which had not been picked up on the Snellen Chart), and home and other environmental factors pointing to considerable cultural deprivation and enervation. Having been assigned to a class for mentally retarded, the equivalent in common parlance of mentally deficient, he was so defined by his parents, teachers and peers and was well along toward accepting this definition of himself, this self-image. Imagine the debilitating result of this situation were it to remain in effect a few years. No doubt it is in effect in some classes today. Adequate diagnosis should be legally mandatory before such special class placement!

In another special class for mentally deficient youngsters, a boy of twelve was found to be brain-injured, seriously disturbed emotionally, given to self-destructive acts such as jumping out of second-floor windows, cruel to others, the son of a tyrannical, semi-literate father who insisted that the boy was normal and should be in a regular classroom, and a continually disrupting

¹ Director, Special Education Center, Northwestern State College, Natchitoches, Louisiana. For a further statement of the real rationale proposed in this article, see John W. Kidd, "Special Education Fulfilment of a Promise." The Elementary School Journal. Chicago: University of Chicago Press, May, 1958, pp. 454-456.

factor in the special class. He not only negated much of the special class teacher's work with the other children, but was dangerous to himself and others. A patient teacher may be reluctant to protest such an assignment for fear that it will be interpreted administratively as an admission of weakness or failure. And so this potentially explosive situation may exist in other special classes for retarded where placement has been based on the observations and findings of non-specialists. The schools and the public need protection from such miscarriages of educational justice and equity!

Special arrangements were made for speech therapy for a tenyear old who was identified by school personnel, parents and others as a severe stutterer. He was known to have periods of fluent speech. Skilled diagnosticians discovered through projective techniques an indication of extreme hostility toward an adult male. A diagnostic free-play situation resulted in a gesture by the child with a rubber dagger implying the disemboweling or castration of the observing male clinician. Further exploration yielded essentially a repeat performance. After each such destructive act toward the male, the apparent father surrogate, the stutterer had a period of speech fluency unmarked by hesitations or other mannerisms of the stutterer.

Some probing by a specialist in Social Work revealed a kindly intentioned, well-meaning, highly respected father, whose solicit-ousness for his son was interpreted by the boy as domineering, smothering and hateful.

What chance has speech therapy with such a child unless the interpersonal dynamics, the inner hostility of the subject are understood and included in a broader program of parent-counseling, as well as psychotherapy, and possibly speech therapy with the child? Effective utilization of education's dollars, of teachers and therapists, can be obtained only when programs are based on complete and completely understandable and preferably very early diagnosis!

A seriously concerned teacher and her supervisor requested help with a seven-year old who was categorized as inattentive. He had been punished, counseled, and otherwise treated as a misbehaving, uncoöperative child since he entered school more than a year earlier. Whether he should be institutionalized, rejected by the school as "uneducable," or placed in a special class for disturbed

and maladjusted children were some of the alternatives under consideration.

A relatively simple and not too uncommon condition was clinically established which insured a high probability of normal development in a regular classroom once it came to be understood by all concerned. The child had a marked hearing loss, had become quite adept at speech-reading (lip-reading) and gesture interpretation. Whether or not he responded to requests and commands depended not on his attitude as thought but on his attention or inattention at the moment. Corrective procedures and/or devices are almost routinely effective in such cases. Every child should have periodic check-ups, not only for physical conditions—essentially medical, but for mental-social-emotional factors as well. How can teachers teach children, taking them from "where they are," when the teachers don't know "where they are"?

Teachers and school officials cannot and should not, with their

usual training, try to diagnose exceptional children.

Special classes and special therapy can be of tremendous benefit when designed for the particular individuals concerned and in light of complete diagnoses of their exceptionalities; but they can be a waste of money and even harmful if based on guesswork.

What is the answer? Special Education Diagnostic Centers! Not just a school psychologist, not just a pediatrician, or neurologist, or psychiatrist, or other medical personnel, not just a specialist in the diagnosis of reading difficulties, not just a vision specialist, not just a speech and hearing pathologist, not just a visiting teacher or social worker, but a diagnostic center providing for the specialized techniques of all of these and more to be brought into play in finding out why the child is exceptional and what educational or other adjustments, if any, are likely to enhance his ed-

But can this be done? Can schools afford such services? The answers in order: Yes! Schools cannot afford to do less!

The extra money being spent on special classes, speech therapy, homebound instruction, school-to-home telephones and a host of special classroom equipment is in appreciable measure wasted unless additional money is spent to obtain complete educational

A diagnostic center can be established where there are 50,000 or more school age youngsters at \$1.00 per year per child, i.e.,

\$50,000 per year at present values. Such a center can employ, at \$6,000 to \$10,000 each per year (12 months), a director or supervisor, and a staff or four or five specialists. Included should be one or two clinical psychologists, a speech and hearing pathologist, someone especially trained in diagnosis of reading difficulty and vision screening, and a social worker to develop case histories. The center should be able to employ medical consultants by the half-day or less as needed to aid in diagnosis, not to treat.

Based on the properly guided collaboration of such specialists, the services provided for the education and care of exceptional children, if based upon such diagnostic work, will really become

beneficial.

This principle applies to the bright youngsters as well as the

handicapped.

How foolish to attempt an enrichment program or a special class for the so-called "gifted" when the only basis of planning is an IQ score of, say, 130 or some evidence of superior classroom achievement. The individual interests, the specific areas of strength and weakness, the relative strength of various mental factors, the emotional condition of the child and his home situation, the physical stamina or lack of it, specific physical conditions such as vision and hearing, the social status of the youngster particularly in relation to his peers, all these and other factors should be assessed before educational adjustments are undertaken.

The diagnostic centers needed may be established through state, local, or a combination of funds. They may, as in Louisiana, be placed on state college campuses or in school or community facilities. They may be designed to serve a single heavily populated district or county or should be jointly supported by several school

systems if more sparsely populated.

Above all, the diagnostic function of such centers should not be confused with the therapeutic function of guidance centers, mental hygiene clinics, and the like. The function of the special education center should not include therapy or conducting special classes. Therapy and special classes should, in general, be in the school, at home, or in other facilities located and designed for such purposes. These facilities should conduct their programs as results of and in relation to the diagnoses done by the Special Education Centers. Then, too, many exceptional children, particularly among those with physical handicaps, will profit by remaining in the

regular classroom. This is also true of many disturbed and maladjusted children. So, the regular classroom teacher as well as the special teacher can benefit enormously in so many cases by understanding the exceptional child through diagnostic findings of Special Education Centers.

SOME DATA AND SPECULATIONS CONCERN-ING HIGH AND LOW AAUP MEMBERSHIP IN DIFFERENT COLLEGE FACULTIES

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INTRODUCTION

The purpose of this paper is to report and interpret some data pertaining to membership in the American Association of University Professors (AAUP) at various American colleges and universities. While mere membership does not provide any indication as to extent of participation or personal meaning of participation, it does provide at least a gross measure of interest in and allegiance to the AAUP. It should be of considerable interest to discover the conditions that contribute to collective action in the academic profession.

PROCEDURE

The procedure is to determine which characteristics of colleges and universities are associated with having a high proportion of AAUP members on their faculty. A sampling of colleges was used consisting of every other listing (except Negro) in Good's Guide to Colleges, Universities, and Professional Schools in the United States. Junior colleges, teachers colleges, and purely professional schools were omitted. Colleges with fewer than 500 students were also dropped from consideration, which left 239 colleges in the

² Carter V. Good. (Washington: American Council on Education, 1945).

¹ Hereafter the word "college" will be understood to include university except where it is otherwise qualified.

sample. The following additional data were gathered for each college: enrollment and size of faculty,3 AAUP membership,4 student/faculty ratio,5 and annual college income.6

The percentage of AAUP members in the faculty was computed for each institution (median percentage: 24) and is the dependent variable of the study. Two other ratios were computed for each institution-the student/faculty ratio (median: 15), and annual income per student (median: \$900).

In the following sections the relationships between "strong AAUP chapters" (defined as those which have 24 per cent or more of the faculty in the AAUP) and certain other characteristics of the institution, such as size, type, and quality are presented and interpreted. It would have been instructive to discover whether there is any relationship between strong AAUP chapters and faculty income, but unfortunately such data are not readily available.

FINDINGS

Type of college. Type of college is the most important determinant of whether AAUP chapters are strong or weak. Table I reveals that 64 per cent of the publicly controlled colleges and universities have strong chapters; 58 per cent of the private liberal arts colleges, 38 per cent of private universities, and 13 per cent of the Roman Catholic colleges and universities have strong chap-

Size of college. When colleges are divided into two groups according to whether they are above or below the median enrollment for all colleges, the stronger AAUP chapters turn out to be at the larger institutions (Table II). When the relationship is controlled for type of college it holds for liberal arts colleges taken separately but disappears completely for colleges of other types.

Quality of college. The quality of a collegiate institution is difficult to assess and is probably dependent on subjective judgment. Nevertheless it seems reasonable to use as rough indices of quality two conventional and convenient measures—the student-faculty

World Almanac (New York: New York World Telegram, 1955), or The College Blue Book, by Christian E. Burckel and Huber W. Hurt (Yonkers, New York: Christian Burckel and Associates, 1953). * AAUP Bulletin, Spring, 1954.

Clarence E. Lovejoy, Lovejoy's College Guide, 1953-54 (New York: Simon and Schuster, 1954), or by computation. The College Blue Book, op. cit.

Table I.—Percentage of Strong and Weak AAUP Chapters in Various Types of Colleges

Type of College	Strong Chapters	Weak Chapters	Total	
	%	%	%	
Publicly controlled colleges and universities (61)	64	36	100	
Private liberal arts colleges (109)	58	42	100	
Private universities (29)	38	62	100	
Roman Catholic colleges and universities (40)	13	87	100	

N:239

X2:31.5

P less than .001*

* This line means that the probability of the relationship's being due to chance is only one in a thousand. Correspondingly, in subsequent tables a P of .01 indicates a probability of one in a hundred; a P of .05 indicates a probability of one in twenty; etc.

TABLE II.—PERCENTAGE OF STRONG AND WEAK AAUP CHAPTERS IN COLLEGES OF DIFFERENT ENROLLMENTS

Enrollment	Strong Chapters	Weak Chapters	Total
	%	%	%
All colleges Under 1300 (119) 1300 and over (120) N:239 X ² :4.0	43 56	57 44	100 100
P less than .05 Private liberal arts colleges only Under 900* (51) 900 and over (58) N:109	45 69	55 31	100 100
X^2 :6.3 P less than .02			

^{*}The figure 900 is an approximate median enrollment for liberal arts colleges.

ratio (the assumption being that fewer students per faculty member makes for better education) and annual income per student (on the assumption that greater income purchases better education).

The latter measure differentiates sharply between schools with strong and weak AAUP chapters. Schools with an annual income per student of \$900 or more (from all sources) are fifty per cent more likely to have strong AAUP chapters than are other schools (Table III). Although this relationship holds when controlled by size it attains statistical significance only for colleges with enrollments between 900 and 3000. When it is controlled by type of college (Table III) the positive association between high annual income per student and strong AAUP chapters does a peculiar thing. For private liberal arts colleges it remains in the same direction and with equal significance but it becomes reversed (though not

TABLE III.—PERCENTAGE OF STRONG AND WEAK AAUP CHAPTERS AT COLLEGES WITH DIFFERENT ANNUAL INCOMES PER STUDENT*

Annual income per student	Strong Chapters	Weak Chapters	Total
All colleges	%	%	%
Below \$900 (121)			
\$900 or more (112)	40	60	100
N :233	61	39	100
$X_2:9.5$			
P less than .01			
Private liberal arts coll-			
\$900 or more (48)	45	55	100
IN :106	73	27	100
X2:8.5			204
P less than .01	i		
rubliely controlled and			
universities only			
DEIOM 2800 (31)			
\$900 or more (20)	71	29	100
14:01	60	40	100
X2:.8		10	100
P less than .50			
TIVATE Universit:		1	
Sand of Mote (12)	50	50	100
14 :29	29	71	
X2:1.3		(1	100
P less than .30			

^{*} Catholic colleges are not presented separately because not enough of them have strong AAUP chapters to treat them statistically.

Table IV.—Percentage of Strong and Weak AAUP Chapters at Colleges with Different Student/Faculty Ratios*

Student/Faculty Ratio	Strong Chapters	Weak Chapters	Total
	%	%	%
All colleges			
Under 15 (120)	52	48	100
15 or over (119)	47	53	100
N :239			
$X^2:.5$			
P less than .70			
Private liberal arts colleges only			
Under 15 (57)	70	30	100
15 or over (52)	44	56	100
N :109		1	
$X^2:7.5$			
P less than .01			
Publicly controlled colleges and			
universities only			
Under 15 (31)	55	45	100
15 or over (30)	73	27	100
N :61			
X2:2.3			
P less than .20			
Private universities only			100
Under 15 (14)	29	71	100
15 or over (15)	47	53	100
N :29			
X ² :1.0			
P less than .50			

^{*} Catholic colleges are not presented separately because not enough of them have strong AAUP chapters to treat them statistically.

statistically significant) in publicly controlled colleges and universities and in private universities.

The student/faculty ratio does not differentiate between colleges with strong and weak chapters except in the case of private liberal arts colleges, where the strongest chapters are at schools which have a ratio of less than 15⁷ (Table IV). However, there is

⁷ It is relevant to note here that the colleges with the highest percentage of low student/faculty ratios are the Roman Catholic institutions, followed (in order) by private liberal arts colleges, private universities, and lastly publicly controlled colleges and universities (significant at the .01 level); and also that the smaller the college the more likely it is to have a student/faculty ratio under 15 (significant at the .05 level).

TABLE V.—PERCENTAGE OF STRONG AND WEAK AAUP CHAPTERS AT Colleges with Both Annual Incomes per Student of \$900 or More and Student/Faculty Ratios Under 15

Strong Chapters	Weak Chapters	Total
%	%	%
61	39	100
45	55	100
	Chapters % 61	Chapters Chapters % % 61 39

N:233 X2:5.4

P less than .05

a parallel with the annual income per student measure in that the relationship is reversed (but not statistically significant) for publicly controlled colleges and universities and private universities.

Similar results occur if we combine the two measures of quality and isolate those colleges that have both an annual income per student of \$900 or more and a student/faculty ratio under 15. There are 77 such colleges among the 233 for which we have complete data, the highest percentages being found in publicly controlled colleges and universities, followed in order by private universities, private liberal arts colleges, and Roman Catholic colleges and universities. The association between these colleges of high quality and strong AAUP chapters is statistically significant (Table V), and holds when controlled by size except for institutions over 3000, where there is no association at all. When controlled for type of college the association again holds for private liberal arts colleges (significant at the .001 level), but is in the opposite direction (though not statistically significant) at publicly controlled colleges and universities.

INTERPRETATION

Why should publicly controlled colleges and universities have such a high percentage (64%) of strong AAUP chapters and Roman Catholic colleges and universities such a low percentage (13%)? It is easier to account for the latter than for the former. The AAUP by its very nature is a kind of protest organization. It performs defensive and protective functions for an occupational group which is not very powerful even when acting collectively.

Roman Catholic institutions include many members of religious orders on their faculties.³ These persons are already identified with a collectivity related to their teaching function, particularly where scholarly activity is a prime objective of the order, as with the Jesuits. Not only this, but the norms of spiritual obligation and service of Catholic orders, and the emphasis on discipline are not especially compatible with membership in a "protest" organization. Members of religious orders also already have a kind of "tenure," are not so financially motivated, and probably are not so likely to view their religious superiors as "the opposition," as some other academicians appear to do.

In publicly controlled institutions, on the other hand, relations with administrators are formalized and bureaucratized, particularly when authority is vested in a distant board of regents or when the institution is part of a state-wide university system. If such is the case and if faculty members feel impotent in dealings with distant authority, membership in the AAUP may be a way to gain a feeling of participation in decisions affecting one's fate

and one's future.

The relationship between strong AAUP chapters and size of college seems easy to account for. In a small institution personal face-to-face relations can resolve differences and grievances which in a larger institution would go unresolved. The individual faculty member at a small school is less likely to feel "lost" and powerless, and hence may be less likely to feel the need to join with others in a professional association devoted primarily to betterment of

the working conditions of his profession.

Interpretation becomes more difficult when we consider the quality of different colleges and universities. Each of the measures of quality suggests that strong AAUP chapters are associated with better private liberal arts colleges and with poorer publicly controlled colleges and universities and private universities, although the latter two relationships are not statistically significant. How do we account for this? The explanation may be that in the better private liberal arts colleges the AAUP is not primarily a protest organization but an expression of professional solidarity of the

⁸ In the academic year 1953-54, 40.8% of the 19,071 faculty members at Catholic Colleges and Universities in the United States were members of religious orders. Source: Department of Education, National Catholic Welfare Conference. Washington, D.C.

faculty. Indeed the AAUP membership in some of these colleges comprises over 90 per cent of the faculty, and in many the member-

ship is over 70 per cent.

Why, if publicly controlled schools have the highest percentage of strong AAUP chapters, should it be the poorer publicly controlled schools which have the strongest chapters? The reason may be that the conditions making for strong AAUP chapters at publiely controlled institutions are most pronounced where the student/faculty ratio is high and the annual income per student is low. Certainly the impersonality and frustration of mass teaching are at a maximum under such conditions. The same conditions also exist at some large private universities.

The better publicly controlled institutions and private universities, however, tend to have relatively low percentages of AAUP memberships. We may assume that a low percentage of AAUP memberships reflects basic satisfaction with the teaching situation at these institutions. Among the reasons may be a tendency for these faculty members to identify with their particular institution rather than with the academic profession as a whole. Such identification with one's institution would be less likely to occur at even an outstanding liberal arts college but could occur at "élite" universities. While there are obvious economic, as well as non-economic, benefits from teaching at top-flight universities (public or private), this fact alone does not explain why the association of strong AAUP chapters in better private liberal arts colleges is the reverse of what it is in better public and private universities. We need a single explanation which will account for both phenomena. The hypothesis is suggested that in the better private liberal arts colleges AAUP membership represents solidarity with one's colleagues and with a wider professional fraternity, whereas in the better public and private universities equivalent recognition is gained simply from faculty status in an important and prestigeful institution. Some faculty members at such institutions may even view the AAUP as primarily the instrument for betterment of the working conditions of their more unfortunate brethren at inferior schools, and for this reason shy away from joining it.

Strong AAUP chapters thus appear to be a phenomenon most closely associated with the stronger and better private liberal arts colleges, and with publicly controlled colleges and universities and private universities of less than top quality. It is noteworthy that all these institutions are primarily concerned with the teaching of large numbers of undergraduates rather than with advanced subject-matter orientation in fields of specialization. Those involved in such teaching may not be very satisfied doing it and hence may feel sufficient frustration and resentment to become AAUP members. In any event, since in everyone's mind the profession of professors is most closely associated with professing a subject matter to students, rather than with the task of pushing back the frontiers of knowledge, it seems appropriate that the American Association of University Professors should be principally constituted of those mainly concerned with teaching undergraduates in large, over-crowded public and private universities as well as in better-than-average liberal arts colleges.

To summarize, the percentage of AAUP members in the faculties of various collegiate institutions is greatest in private liberal arts colleges of high quality and in public colleges and universities, and private universities, of less than top quality. The proportion is lowest in the better public colleges and universities and private universities, in liberal arts colleges of inferior quality, and in Roman Catholic colleges and universities. The reasons that have been advanced to explain these findings are tentative and need to be supported by intensive investigation of the motives and meaning of AAUP membership at particular institutions.

CAN PRINCIPALS EXCLUDE THEIR OWN PERSONALITY CHARACTERISTICS WHEN THEY RATE THEIR TEACHERS?

JOHN H. M. ANDREWS and ALAN F. BROWN

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The search for an adequate means of measuring teacher effectiveness has attracted considerable attention for many years. It has resulted in the proposal of many different means, some of which appear to be of great promise. But, despite its suspected limitations, the method of rating by the principal persists as probably the most widely used measure for both administrative and research purposes.

Of the suspected limitations inherent in principals' ratings of teacher effectiveness the one investigated in this research is the possibility that the ratings are partly determined by the extent to which the teacher is similar to the principal in certain personality characteristics. If this is so it is clearly a spurious effect and would tend to invalidate the ratings by principals as real measures of teaching effectiveness

Theoretical considerations seem to point to the existence of such an effect. Guba and Bidwell (6) found that the principal's estimate he perceives that the teacher conforms to the principal's expectations for the teacher-rôle. Since the personality of the principal is likely to influence his expectations for teacher behavior and, nant of the teacher's behavior, it would be expected that similarity high rating for the teacher. In support of this argument, Stern, principal rates is a function of transactional relationships between process attention is drawn to the principal as a part of the social environment. In the rating environment.

A study by Prince (7), however, failed to verify the hypothesis drawn above. The twenty principals and 100 teachers in his investigation showed no significant relationship between degree of

teacher-principal congruence of educational values (classified as emergent—traditional) and principal-rated teacher effectiveness. Prince reasoned that, because of the principal's background of experience and training and because of the number of comparisons he makes daily among teachers, it is not necessary that their values coincide with his. It is noted that the term "personality" is used here in a sufficiently broad sense to include such characteristics as structure of educational values.

This study is another attempt, using different measures of personality characteristics, to detect a relationship between teacher-principal similarity and the ratings of effectiveness assigned by the principal to teachers. The personality elements considered are personality needs, dominant values, and educational attitudes. Stated in its positive form, the hypothesis is that effectiveness ratings assigned to teachers by the principal are positively related to the degree to which the teacher's measured needs, values, and educational attitudes are congruent to the principal's measured needs, values, and educational attitudes.

METHOD

Subjects. The 608 teachers and principals used in this study comprised approximately the total faculties of nine large high schools, were within 150 miles of Chicago—but not inside the Chicago system—and were located in three states: Illinois, Indiana and Wisconsin. The communities represented ranged from residential suburb to industrial suburb and from the semi-rural small town to the city. The data were gathered for a study sponsored by the Midwest Administration Center and reported elsewhere by one of the authors (1) (2).

Instruments and Scores. Testing the hypothesis necessitated the use of instruments with which to quantify the dependent variable—the principal's estimate of a teacher's effectiveness—and each of the three independent variables—teacher-principal similarities in needs, values and educational attitudes. A six-point Principal-Rated Effectiveness Scale was devised. It was designed to elicit from the principal a subjective judgment of a teacher's global effectiveness in terms of degrees above and below the average effectiveness of teachers in the particular school.

To measure psychological needs, the Edwards Personal Preference Schedule (EPPS) was administered. This is a standardized

test purporting to measure fifteen manifest needs found in normals; they are as follows:

- (1) Achievement: to do one's best, be successful, accomplish tasks requiring great skill and effort, to do things better than others.
- (2) Deference: to get suggestions from others, find out what others think, praise others, do what is expected, and the like.

(3) Order: to have written work neat and organized, make plans

before starting a difficult task, and the like.

- (4) Exhibition: to say witty and clever things, talk about personal adventures and experiences, be the center of attention, and the like.
- (5) Autonomy: to come and go as desired, say what one thinks, be independent from others when making decisions, and the like.

(6) Affiliation: to be loyal to friends, participate in friendly

groups, form new friendships, and the like.

- (7) Intraception: to analyze one's motives and feelings, observe others, understand how others feel, predict how they will act, and
- (8) Succorance: to have others provide help when in trouble, seek encouragement from others, and the like.
- (9) Dominance: to argue for one's point of view, to be and to be regarded as a leader, to persuade and influence others, and the like.
- (10) Abasement: to feel guilt when one does something wrong, to be depressed by inability, give in and avoid a fight, and the like.
- (11) Nurturance: to help friends when they are in trouble, assist others less fortunate, forgive others, be generous, and the like.
- (12) Change: to do new and different things, experience change and novelty in daily routine, experiment, and the like.
- (13) Endurance: to keep at a task until it is finished, avoid being interrupted while working, and the like.
- (14) Heterosexuality: to go out with members of the opposite sex, engage in social activities with members of the opposite sex,
- (15) Aggression: to attack contrary points of view, criticize others publicly, get revenge, become angry, and the like.

The EPPS provides a fifteen-score profile. The degree to which the needs of a teacher and his principal were congruent was determined by the Cronbach-Gleser D^2 method as indicated by the following formula:

$$D_{12}^2 = \sum_{j=1}^k \left(x_{j_1} - x_{j_2} \right)^2$$

where j is any of k variables included in the profile. The lower a teacher's D^2 score, the greater is the similarity between his measured needs and those of the principal who has rated his effectiveness.

To determine the similarity of value-orientations between a teacher and his principal, the D² method was applied to the six-score profiles obtained from the subjects' responses to the Allport-Vernon-Lindzey "Study of Values" (AVL). These value-orientations, derived from Spranger's Types of Men, are as follows:

(1) Theoretical: the dominant interest of the theoretical man

is the discovery of truth.

(2) Economic: the economic man is characteristically interested in what is useful.

(3) Aesthetic: the aesthetic man sees his highest value in form

and harmony.

(4) Social: the highest value for this type is love of people; it is altruistic or philanthropic love that is measured.

(5) Political: the political man is interested primarily in power,

especially in terms of competition or struggle.

(6) Religious: the highest value for the religious man may be called unity; he is directed toward the highest and most satisfying

value-experience.

Educational attitudes of the subjects were assessd with the use of the Minnesota Teacher Attitude Inventory (MTAI) which yields a single score. This test is designed to measure the attitudes of teachers toward pupils. A high score indicates those attitudes which are commonly described as progressive. A low score indicates traditional attitudes. The absolute difference between teacher and principal MTAI scores revealed their attitudinal similarity: the lower the absolute difference, the greater the teacher-principal similarity.

Analysis. the general hypothesis, that teacher-principal similarity in personality characteristics is related to effectiveness ratings, was broken down for testing purposes into three specific hypothe-

ses. The relationship was sought separately for each of the three personality characteristics under consideration-needs, values, and educational attitudes.

In testing these three hypotheses, the ratings were grouped by school and by sex. Each group was divided into three approximately equal classes (high, medium and low effectiveness ratings) according to the distribution of ratings for that group. Similarly, within each group the congruency scores (absolute difference or D2) of each variable were divided into three equal classes indicating a high, medium or low degree of similarity with the principal's score or profile. The three hypotheses were then tested by constructing three-by-three chi-square tables.

RESILTS

Attitudes. The specific hypothesis regarding educational attitudes as measured by the teacher-principal MTAI score-differences was not supported. From Table I it is observed that of the eight groups tested-males and females in each of nine schools-only two yielded chi-square values significant at the .05 level of confidence. In both instances the teachers were males. The chi-square value for all males is misleading; it appears to indicate that the relationship between congruency scores and effectiveness ratings of

TABLE I.—THE RELATIONSHIP BETWEEN EFFECTIVENESS RATINGS AND TEACHER-PRINCIPAL SIMILARITIES IN EDUCATIONAL ATTITUDES

			DIMILARITIES IN		ONAL ATITT	ODES
School		Males		Females		
1	N	χ2	Pa	N	x ³	Pa
2	56 63	3.160 2.843		45	8.474	
3	28	4.167		41	2.756	
4 5	28	2.006		37	1.692	
	22	5.447	-	27	3.983	
6	39	9.267	-	29	3.394	
7	27	6.502	.05	35	5.820	
8	35	18.412	_	21	1.500	
9	22	2.972	.001	24	1,607	
		2.972	-	18	8.269	
A dash i	320	54.776	.05b	277	37.432	

A dash indicates a probability greater than .05.

b When school 8 is subtracted, total remaining $\chi^2 = 36.364$ and P = .27.

TABLE II.—THE RELATIONSHIP BETWEEN EFFECTIVENESS RATINGS AND TEACHER-PRINCIPAL SIMILARITIES IN VALUE-ORIENTATIONS

	Males			Females		
School -	N	X3	Pa	N	X ₃	P
2	62	3.547		41	1.321	_
3	26	6.018		36	1.752	_
4	28	8.176	_	26	5.207	_
5	21	4.196	_	27	2.284	_
6	40	3,490		33	2.488	_
7	27	1.115	-	21	2.500	
8	36	10.224	.05	22	11.430	.05
9	22	3.781		17	4.078	
Total	262	40.547	_	223	31.060	_

^a A dash indicates a probability greater than .05.

all males is significant at the .05 level, whereas seven of the nine groups failed to approach significance. When one school is removed from the list, however, it is seen that the relationship of attitudinal similarity to effectiveness rating among males of the remaining eight schools is well below the level of significance (P = .27).

Values. It was not possible to obtain usable AVL data from one of the participating schools. Of the sixteen groups in the remaining eight schools, fourteen of them failed to indicate any significant relationship between effectiveness ratings and teacher-principal congruency score calculated from the AVL. Similarly, the relationship was not significant when considering all the males or all the females whose data were available. From Table II it is observed that for School 8 similarity between teacher's and principal's value-orientations was significantly associated with effectiveness ratings among both male and female teachers.

Clearly, however, the second specific hypothesis of this study

failed to obtain general support from the data.

Needs. The subjects used in this part of the study were the male and female teachers of seven schools, or fourteen test groups. Table III indicates that among the 379 teachers and their seven principals there was no significant relationship between effectiveness ratings and teacher-principal similarities of manifest needs. Similarly, the chi-square totals, by sex, failed to support the hypothesis.

TABLE III.—THE RELATIONSHIP BETWEEN EFFECTIVENESS RATINGS AND TEACHER-PRINCIPAL SIMILARITIES IN MANIFEST NEEDS

School N	Males			Females		
	N	X ²	Pa	N	x2	P
2 3	57 23	2.848		30	2.195	_
4	24	6.952	-	30	4.598	_
5	18	2.952		24	8.060	
6	30	2.500	_	23	4.061	
7	25	7.980	_	28	4.523	
8	31	8.566	_	17	4.576	_
_	31	3.675		19	3.319	
Cotal	208	35.473	_	171	31.332	_

^a A dash indicates a probability greater than .05.

DISCUSSION

When it is considered that, of the forty-eight chi-square tests, only four were significant at the .05 level it may reasonably be concluded that this investigation furnishes no support for the general hypothesis. It is interesting to note, however, that three of the four significant relationships refer to the ratings of the same principal (School 8). Quite likely, if the hypothesized effect did exist, it would be demonstrated by some principals to a greater extent School 8 is unusually subject to including personal considerations in his ratings of teacher effectiveness

The lack of support for the general hypothesis may be construed in different ways. It may be, indeed, that the hypothesized effect does not exist. If this were so the principal's rating of teacher effectiveness could be used with a great deal more confidence than it a necessary conclusion

The other possibility is, of course, that the effect does exist but remained undetected. It may have been undetected for any of three reasons: (1) the instruments used may have been grossly inadequate, (2) the statistical definition of "similarity" inherent in the Cronbach-Gleser formula may not have been the appropriate kind of similarity, and (3) the hypothesized effect may exist but

in such small quantity as to be negligible as a factor detracting from the usefulness of ratings of teachers.

The instruments used have shown themselves in other studies to be sufficiently useful that they could not be described as grossly inadequate. Their application to this problem, however, should be considered. The personality characteristics of the principal and of the teacher which could influence effectiveness ratings are those which are perceived by the principal. Any that are not perceived by him cannot influence his rating. It may be, then, that the hypothesized effect would be found present if measurement of personality characteristics were based upon perceptions by the principal rather than upon instruments completed by both teacher and principal on their own behalf. While this approach has not been used in relation to effectiveness ratings, it was used by one of the authors (4) in relation to adolescents' perceptions of parents and peers, and by Bieri (3) in relation to learning.

The question of the definition of similarity is raised because the Cronbach-Gleser formula considers, in effect, only the difference between scores of teacher and principal regardless of the direction of difference. A principal who reveals a mild need for orderliness may consider a teacher to be more similar to himself who exhibits a high need for orderliness than a teacher whose score is closer to that of the principal but below it. A formula which accounts for direction in the measurement of similarity (1) might well be used

in further investigations to account for this possibility.

In conclusion, then, subject to the two qualifying possibilities raised above, it does seem that teacher-principal similarity, in those personality characteristics which were considered, either does not influence the effectiveness rating assigned by a principal to a teacher or else it influences it so little as to be undetectable in a group analysis. It cannot be concluded that all school principals are able to exclude their own personalities from their ratings of teachers as successfully as these large high school principals appear to have done. Indeed, it would likely be more difficult in smaller schools where relationships are more highly personalized. At the same time this study, together with that of Prince, referred to earlier, tends to increase confidence, at least tentatively, that spurious personality considerations are not contaminating effectiveness ratings to any marked degree.

SUMMARY

This study has investigated the extent to which ratings of effectiveness assigned by principals to teachers are contaminated by similarity and difference in personality between principal and teacher. The personality characteristics considered were manifest needs, value-orientations, and educational attitudes. Nine principals and their staff members, ranging in number from forty to 105, comprised the total sample of 608 subjects. Each subject was administered the Edwards Personal Preference Schedule (needs), the Allport-Vernon-Lindzey "Study of Values" (values), and the Minnesota Teacher Attitude Inventory (educational attitudes). Similarity in personality characteristics between teacher and principal was expressed by the absolute score difference and the Cronbach-Gleser D² measure of profile similarity. The relationship between effectiveness scores and similarity scores was then tested in contingency tables. Forty-four of the forty-eight tests showed no significant relationship. In result, the study agrees with that of Prince in finding no relationship between teacher-principal similarity in personality elements and principals' ratings of teachers' effectiveness. As such, the study may be interpreted, at least tentatively, as increasing confidence in rating as a measure of effectiveness as far as this spurious personality effect is concerned.

REFERENCES

(1) J. H. M. Andrews, "Administrative Significance of Psychological Differences between Secondary Teachers of Different Subject Matter Fields," Alberta Journal of Educational Research, III: 4 (December 1957), pp. 199-

(2) J. H. M. Andrews, "A Deterrent to Harmony Among Teachers," Administrator's Notebook, March, 1958.

(3) J. Bieri and A. Trieschman, "Learning as a Function of Perceived Simity to Self." (2012, 223,

ilarity to Self," Journal of Personality, XXV: 2 (December 1956), pp. 213-223. (4) A. F. Brown, "The Self in Interpersonal Theory: The Relationship between Attitudes Referring to Self and to Significant Others," Alberta Journal of Educational Research, III: 3 (September 1957), pp. 138-148.

(5) L. J. Cronbach and G. Gleser, "Assessing Similarity between Profiles," Psychological Bulletin, L (1953), pp. 456-473.

(6) E. G. Guba and C. E. Bidwell, Administrative Relationships: Teacher Effectiveness, Teacher Satisfaction and Administrative Behavior, Chicago, Midwest Administration Center, University of Chicago, 1957.

(7) R. Prince, "Individual Values and Administrative Effectiveness," Administrator's Notal College, Values and Administrative Effectiveness," Administrative Effectiveness, ministrator's Notebook, VI: 4 (December 1957), pp. 1-4.

(8) G. S. Stern, M. I. Stein and B. S. Bloom, Methods in Personality Assessment, Glencoe, Illinois, The Free Press, 1956.

BOOK REVIEWS

Verna White. Studying The Individual Pupil. Harper & Brothers, 1958, xviii + 238.

In her preface the author tells of the slow development in the modern methods of study of children which began in the 1930's and of the difficulty faced by a teacher in previous years. Acknowledgment is made to a group of well-known leaders in the field, and the purposes of the volume are given: i.e., to provide busy teachers with information on why and how to study and use information about children, and how to keep the material free from a large burden of technical terms. Seven chapters, a bibliography, index, editor's introduction, and preface make up the book.

The first chapter explains why teachers need to study individual children, and the reasons are briefly stated and well illustrated by specific cases. Next, the problem of possibility and cost of doing this type of teacher activity is presented. Her answer which is "yes" for those schools in which teachers and administrators recognize its need and value, shows that such study is often closely related to school-community problems. As each teacher who attempts this task must ask, "What factors must be considered and what data must I try to obtain?", the author also asks and answers the query in Chapter III. To a busy teacher unfamiliar with this field, this chapter, with its discussion of such conditions as lack of interest, non-attendance, health, emotional status, home conditions, social and economic factors, is worth the whole book.

The crux of the entire matter is how a busy teacher can collect and organize the data for use. Such factors as where to get the data, effective techniques for getting it without increasing her work load, and how to make use of other personnel—children, parents, teachers, and others, are explained in practical terms. Her plans for organizing the information are such that teachers can use them.

In her treatment of interpretation of the data, the author gives excellent help: data should include intellectual, physical, social and emotional conditions and their background sources; contradictions which appear with no supporting data, are better ignored; organization should be into case studies; each case should be approved objectively yet sympathetically; after organization, the data should be studied more than once; first inferences should be

rechecked; inferences should have data to substantiate them. Her

reports of case studies are also helpful.

In Chapter V, the pitfalls of such study are given consideration. These deal with collection and organization of data; keeping data confidential; avoidance of much irrelevant family information about which children may want to talk; planning and practicing interviewing to gain ease and proficiency; maintaining "warm" human relations with children and others. Those who try case study for the first time are warned against inferring too much from the data. This chapter also contains good suggestions for the interview.

A final discussion concerns what this task of individual study of children means for the pre-service and in-service education of teachers and other school personnel. As she points out, it immediately raises the problem of what the desired teacher competencies

are and should be, and how they can be developed.

Each chapter has a summary. The bibliography is short and of good quality. The format and printing are excellent. The reviewer is somewhat astonished to find that a writer can deal with this very detailed and complicated body of information in such a brief and helpful way for the use of teachers. He has to commend this book to the profession.

Gainesville, Florida

A. R. MEAD

H. Otto Dahlke. Values in Culture and Classroom. Harper & Brothers, 1958, pp. xiii + 572.

Here is a new treatise in educational sociology. It is edited by F. Stuart Chapin, and is an addition to the publisher's social science series. Author Dahlke's years of study at several universities and a wealth of field experience in social problems are evident in this work.

The formal organization of the book includes 20 chapters, with 54 tables, 31 figures, and 11 maps. While it is a large compilation of materials it is organized in six parts dealing with the introductory explanations, the socio-cultural background of the school, the structure and organization of the school, the rather informal life of the school and its problems, the triple factors of teacher, school, and community; and finally the school in controversy. Each chapter has a summary and excellent selected references.

The introduction explains the nature and purposes of the book, explains the critical terms, culture, education, functional and normative order, and after a brief historical statement, identifies the

general relations of school and society.

Since the school is a public institution, it has a legal status to which he gives consideration. Constitutions, statutes, court actions, legal agency actions, are all a part of this picture. In it the child, teacher, and plant—each has certain legal foundations and functions prescribed by law. These are minima which must be met. Here, also, is a norm of order and function very much common to all states.

But the school is also a community agency, and Dahlke's long chapter describes the many different types of communities in our nation and their differing problems—from small villages to great metropolitan areas with many overlapping communities within a great city. Block maps have helped to clarify these descriptions.

In Chapters 6–12, he presents materials on functions and "institutional order" of the school. Readers will find here much helpful information and a comprehensive view of the functions through buildings and equipment, the teaching of the older subjects, the socialization of the population through the group process, rather new approaches to discipline which may help some of our many teachers, the status and understandings of the pupils as to the nature of the school—all a view of the total functional program of the school in society and as a part of society.

Chapters 13-15 deal more with the informal internal relations of pupils, teachers, et al.—class differences, conditions that are annoyances to children, childhood and adolescent pupil problems. This section ends with a discussion of evaluation. Sex education

and health, physical and mental, are involved.

Chapters 16-17 deal chiefly with the profession of teaching and its allied work; administration dealing with recruitment, preparation, placement, control on the job, and teachers' professional organization and improvement in service. Chapter 17 describes the prevalent bureaucratic organization of the school systems and makes clear its most obvious weaknesses for our society.

The author takes considerable cognizance of the school as a center of controversy and is perhaps the first of recent educational

sociologists to give this factor appropriate recognition. Here, administrator and teacher alike will find help in the development of both policy and practice. All this is illustrated by some of the current controversies.

The writer commends both author and publisher on this timely and richly filled volume; and recommends it to the profession for study and use.

A. R. MEAD

Gainesville, Florida

Albert H. Shuster and Wilson F. Wetzler. Leadership in Elementary School Administration and Supervision. Houghton Mifflin Company, 1958, xvii + p. 505.

The authors' preface claims that the aim of this book is to help the elementary school principal reach an understanding of "professional leadership competencies" demanded by the position. It includes sixteen chapters, an introduction by the editor, authors'

preface, nineteen figures and an index.

The volume assumes throughout that the principal is the leader in the elementary school in all its important leadership functions. It seems, however, that some principals find that others on their staff sometimes perform well some of these duties of leaders. For example, a teacher can assume that duty with reference to the development and guidance of a chapter of the Future Teachers of America. It may be that the authors assume this situation, but the reviewer has not found it clarified.

What leadership is and how it is achieved is the theme of the first three chapters, which are accompanied by recent and useful references. Various techniques such as job analysis, and much study and planning are included.

The balance of the volume deals with leadership in the community (two chapters), leadership through supervision (really eight chapters), and leadership in administrative functions (four

The chapters on supervision, in-service education of the staff, curriculum development and improvement of teaching, development and direction of guidance, and pupil-personnel practices are

excellent in that they all contain helpful suggestions for the prin-

cipal in his preparatory period and in service.

There are only a few points on which the reviewer raises questions. One is that in the second paragraph above. Another is the relationship between the principal and the task of evaluating teaching-together with supervision. In a small elementary school of say fifteen teachers and other auxiliary workers, the principal can probably do all this and more too. In a large elementary school, however, to tie the evaluation of teaching for salary in with supervision to improve teaching and learning, raises some problems of human relations and morale. How many teachers want one person to exercise these combined functions, especially in large schools where few principals actually have the detailed data or the time to do all these things? Here is a clear need for delegation of important functions and relationships.

The authors' treatment of this work is, with very few minor exceptions, based upon a philosophy of democracy in educational administration—a marked contrast to treatises of say ten years ago. This approach will help in the creative growth of many

teachers and other workers in the elementary schools.

In addition, there are many examples of plans and techniques very useful and effective with teachers, children, parents, and the community. The reviewer is glad to commend this volume to the profession. It could very well be supplemented by some of the older studies not mentioned in the references, such as those dealing with the individual conference in supervision, the rôle of studying teaching and of learning, by observation, of the dual process and how to use data from such sources.

The format and printing are good. It is a readable volume.

A. R. MEAD

Gainesville, Florida

A. T. Welford, Ageing and Human Skill, London: Oxford University Press, 1958, pp. 300.

In the fast growing literature of more or less accurate reports on the senescent (often unfortunately called senile) it is a pleasure to find a study which is essentially limited to results of controlled experiments checked by careful observational studies in the field.

This book replaces the 1951 report entitled, Skill and Age: An Experimental Report. It gives a concise account of further and much more extensive studies.

The research was sponsored by The Nuffield Foundation at the Cambridge University Psychological Laboratory and is probably the most thorough study that has been made to the present time. The studies include young adulthood through the middle years to the seventies with emphasis on ageing and not solely on old age. The work was done through the years 1946-56. Twenty-five members of the research unit are listed.

On the methods employed the author says: "We shall not here be concerned with large-scale fact-finding investigations such as surveys of the numbers of men in different industries or on various grades of work. . . . We shall instead concentrate on the methods of more intensive studies consisting firstly of experiments, usually conducted in a laboratory, and secondly of studies of actual work in industry either by means of factory records or by direct observation and measurement of industrial performance." (p. 44) And we can agree with his further statement that, "For the clearest results experimental and industrial studies need to be closely integrated. Experiments need verification from industrial investigations: these need guidance from experimental results and can in turn give rise to further experimental inquiry." (p. 46)

More care than is sometimes found was used in drawing conclusions and in suggesting applications. It is clearly pointed out that knowledge has been too limited, that difficulties of accurate research have frequently not been overcome, that conclusions have often failed to make necessary distinctions, especially in the activities of learning, translating, and responding, and that certain problems are still without answer and perhaps have generally not

Eleven chapters deal respectively with the nature of age changes in performance; the nature of skill; methods of studying age changes; speed and accuracy of movement; pacing, accidents and heavy work; translation; perception; problem solving; learning and memory; adaptability; and brief concluding remarks on where

research has led us and where we should go from here. The style is clear and free from mystical jargon and reified hypotheses. Explanatory theories are held in better control than one often finds. The text is enriched by many tables and graphs

which fail to state numbers of cases. The scope of the study and the comparisons available are indicated by the tabulations which differ somewhat in age groupings: e.g., 18-29, 45-82; 15-29, 30-39, 40-49, and 50-59; 15-20, 21-29, 30-39, 40-49, 50-71; twenties, thirties, forties, fifties, sixties, seventies; under 30, over 30; etc.

Certain statistical details appearing in the original journal articles have been omitted, "but no age trend or other difference has been mentioned without qualification unless it has been found to

be significant at the 5 per cent level or better."

W.

This is a particularly valuable contribution to the problems of ageing and to the possible (?) forming of a basis for an "ergopoeia" analogous to the "pharmacopocia" when enough additional work has been done. What has been accomplished in each area indicates the need for "a great deal of further work. The results obtained constitute little more than an extensive exploration and a beginning of the definition of essential problems."

The volume concludes with carefully selected references (pp. 290-296), and a fairly adequate index (pp. 297-300). It is worthy of careful study not only for the special subject of ageing but also for insight into several subjects of general psychology. It will be of interest not only to those who wish to know in what ways older people do not do as well as younger, but also to those who desire to know or ought to know how the older workers excel the younger.

A. S. EDWARDS

The University of Georgia

CHARLES R. FOSTER. Guidance for Today's Schools. Ginn & Company, 1957, pp. xiv + 362.

Here is a volume of fourteen chapters written by an author who for many years has been a worker in guidance in university and other agencies. His share in organizations dealing with guidance is well known.

The objective of the volume is to provide help for teachers in their pre-service education and help for workers in service. It is intended as a basic treatise and can be so used with beginners in this work. The materials do provide potential help to these groups.

Chapter one examines the concept of responsibilty for guidance and explains the basic meaning of both guidance and counseling. This is followed by an exposition of guidance as an educational process in which principles of learning, growth and evaluation are all functionally involved. The scope of guidance is explained in the third chapter. How all share in this task is the theme of Chapter four; team work is emphasized.

Chapters five to ten, inclusive, explore the following areas of guidance: in the classroom; in activities of a school-wide character; in the "life of the school"; in the community; in and for home and family life; and in work and vocations. In each case, the author has given an excellent view of the problems, needs, resources and ways of doing this kind of work.

Chapters eleven and twelve deal in more detail with vocational guidance and treat of such matters as self-analysis and search for career goals, school projects of vocational guidance, and how all these are related to community, social conditions and resources.

Anyone engaging in guidance faces difficult problems concerning the use of tests and evaluations and kinds of programs for guidance in school and community. The author establishes some premises about these matters in Chapter thirteen and also lists

His last chapter gives some guidance to those who are thinking of careers in guidance work—what preparation is needed, kind of program involved and other matters. The appendices include specimens of career-day and college-day programs for schools, an excellent bibliography and lots of visual helps for use in this work. The index is of good quality.

The form and printing are good and free from errors.

The reviewer finds this a very representative body of materials well suited for the objective given by the author. For those institutions which offer but a single course in guidance this is a good text. The "box" form illustrations of the functions of different personalities in guidance are very helpful. The bibliography is representative of the literature up to the date of publication. If this volume is to be used with students in graduate work, perhaps the bibliography will be sufficient; but much of it, however, cannot be utilized in a beginning course. Nor can it be used in courses in service, where time is very limited. Perhaps instructors using this text will wish to supplement certain parts with some exercises, theoretical problems or real projects.

The task of writing such a volume and of selecting the material

from the vast amount in existence is great and the author has done well. The reviewer commends this volume to the profession for the uses for which it is intended.

A. R. MEAD

Gainesville, Florida

The Secondary School Curriculum: The Year Book of Education— 1958. Joint editors: George Z. F. Bereday and Joseph A. Lauwerys. Prepared under the auspices of The University of London Institute of Education and Teachers College, Columbia University. Published in the United States of America by World Book Company, Yonkers-on-Hudson, New York, 1958. Pp. 544.

As an "academic bridge" across the seas, this 1958 Year Book continues the tradition of the series in throwing the light of comparative education upon crucial problems of theory and practice. This treatment of the secondary curriculum is broad enough to reflect ideas about philosophy, economics, guidance, technological development, and the status of teachers appearing in the Year Books of recent years. The editors' introduction, "The Content of Education," is a clear, comprehensive exploration of current problems, which will be highly stimulating to both the responsible administrator and the neophyte in the profession.

The Year Book's forty-nine chapters are organized in five sections, each opening with a pithy editorial introduction: tradition and the curriculum, stated aims and objectives, the curriculum in the educational pattern, the influence of social circumstances, the ories of education and curriculum reform. Thus advance is made from historical insight through current policy and practice with consideration of the societal setting to a foretaste of the secondary

school of tomorrow.

The list of contributors is distributed around the globe. While over half of the chapters are almost equally shared by England and the United States, the rest of the world is well represented by France, Netherlands, West Germany, Italy, Israel, Soviet Russia, Yugoslavia, Communist China, Ceylon, the Philippines, Japan, Ethiopia, Ghana, South Africa, Australia, and Canada. So the reader can go into Asia or Africa or behind the Iron Curtain.

In addition, the wide cultural range reaches from a primitive, nomadic tribe in Ethiopia and the effects of technological change in Ghana to cross-culture comparisons, such as, Donald Miles' contrast of curriculum change in the U. S. A. and France, while C. H. Dobinson writes of French "Centres D'Apprentissage" out of experience as Head Master of an English Grammar School, and Pedro Orata presents the Philippine Secondary School Curriculum from his UNESCO desk in Paris

Particularly interesting to the reviewer was "Social Change and the Curriculum" by Brian Holmes, Assistant Editor of the Year Book, with his concepts of "critical dualism" and "comparative education as a synthesizing social science." The only woman contributor is Katherine Whiteside Taylor on "How Parents Contribute to Curriculum-making in the United States." These items who is interested in any secondary of approaches made here. A person fruitful pages between the covers of the 1958 Year Book. Cerseries on their shelves.

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PUBLICATIONS RECEIVED

JOHN W. BEST. Research in Education. New York: Prentice-Hall,

Inc., 1959, pp. 320.

ROBERT L. BRACKENBURY. Getting Down to Cases: A Problems Approach to Educational Philosophizing. New York: G. P. Putnam's Sons, 1959, pp. 222.

Carl H. Delacato. The Treatment and Prevention of Reading Problems. Springfield, Illinois: Charles C Thomas, 1959, pp.

WILLARD S. ELSBREE AND HAROLD J. McNally. Elementary School Administration and Supervision. Second Edition. New York:

American Book Company, 1959, pp. 551.

John Gabriel. An Analysis of the Emotional Problems of The Teacher in the Classroom. Melbourne: F. W. Cheshire, 1957, pp. 224.

Roger H. Garrison. The Adventure of Learning in College. New

York: Harper & Brothers, 1959, pp. 270.

CARL GERBRACHT AND ROBERT J. BABCOCK. Industrial Arts for Grades K-6. Milwaukee: The Bruce Publishing Company, 1959, pp. 160.

CARTER V. GOOD. Introduction to Educational Research. New

York: Appleton-Century-Crofts, Inc., 1959, pp. 424.

Nelson B. Henry, Editor. Personnel Services in Education. The Fifty-eighth Yearbook of the National Society for the Study of Education. Part II. Chicago: The University of Chicago Press, 1959, pp. 303 + cv (paper).

J. N. Hook. The Teaching of High School English. Second Edition. New York: The Ronald Press Company, 1959, pp. 532.

Edna Johnson, Evelyn R. Sickels and Frances Clarke Sayers. Anthology of Children's Literature. Third Edition. Boston: Houghton-Mifflin Company, 1959, pp. 1239.

Louis Kaplan. Mental Health and Human Relations in Education.

New York: Harper & Brothers, 1959, pp. 476.

MILDRED L. MONTAG. Community and College Education for Nursing. New York: McGraw-Hill Book Company, Inc., 1959, pp. 457.

EDGAR L. MORPHET, R. L. JOHNS AND THEODORE L. RELLER. Educational Administration: Concepts, Practices, and Issues. New

York: Prentice-Hall, Inc., 1959, pp. 556.

CLARK E. MOUSTAKAS. The Alive and Growing Teacher. New York: Philosophical Library, 1959, pp. 157.

John W. M. Rothney, Paul J. Danielson, and Robert A. Heimann. Measurement for Guidance. New York: Harper & Brothers, 1959, pp. 378.

EPHRAIM VERN SAYERS AND WARD MADDEN. Education and the Democratic Faith. New York: Appleton-Century-Crofts, Inc., 1959, pp. 472.

RUTH STRANG. An Introduction to Child Study. Fourth Edition. New York: The Macmillan Company, 1959, pp. 543.

W. H. Swift. Trends in Canadian Education. Toronto: W. J. Gage Ltd., 1959, pp. 94.

ROBERT I. WATSON. Psychology of the Child: Personal, Social and Disturbed Child Development. New York: John Wiley & Sons, Inc., 1959, pp. 662.

ROSALIND M. ZAPF. Democratic Processes in the Secondary Classroom. New York: Prentice-Hall, Inc., 1959, pp. 471.

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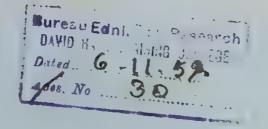
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IMPROVING THE PREDICTION OF SCHOOL ACHIEVEMENT BY USE OF THE CALI-FORNIA STUDY METHODS SURVEY¹

HAROLD D. CARTER

University of California

INTRODUCTION

In the investigations reported here, the aim has been to predict school achievement on the basis of factors other than intelligence and prior school achievement. To be specific, an attempt has been made to devise a self-report inventory for prediction of school achievement. The studies are primarily concerned with use of personality scales for prediction of scholarship, but the purpose has also included improvement of the prediction afforded by measures of intelligence. We have therefore been concerned with the relationships between the inventory scores and other predictors, specifically intelligence test scores.

In the present report, new data, collected and analyzed in 1958, are presented. However, in order to place this material in context, we shall consider briefly the series of investigations leading up to the present one. The first studies were made in 1946 and 1947, and published in 1948. Since that time, progress in various parts of the research has been presented in a series of articles published in 1950, 1951, 1953, 1955, 1956, and 1958. In the course of this work, thousands of students in high school and college have been examined by means of tests of intelligence, as well as with study methods inventories.

The present report is concerned with results from about fifteen hundred students in three high schools. A representative sampling

This is the text of a report presented at the December, 1958, meeting of the A.A.A.S. in Washington, D. C. The research was facilitated by financial support from the research budget of the University of California Department of Education.

of the group has been considered. The data involve high-school grade-point averages, standard tests of intelligence, and scores from the latest form of the California Study Methods Survey.

RELATED LITERATURE

There is much interest in this area of investigation at the present time. A selected list of the better studies made during the past five years would include over 100 titles. The number of contributions is increasing steadily, and it includes studies accepted as doctoral dissertations at more than a dozen of our better colleges and universities. These studies vary somewhat, but they have in common the attempt to predict high-school or college achievement by the use of personality variables as predictors.

A quick survey of the published studies leads to several generalizations. Although each of these may merit more complete discussion, in the interests of brevity, and at the risk of appearing abrupt,

we will merely list them, as follows:

(1) For the prediction of school achievement, the self-report inventories appear more promising than the projective measures which have been used. This conclusion was supported by a review

by Krumboltz (8) published in 1957.

(2) There is great variation in the predictive value of the measures which have been used. Those which have involved some subtlety of approach have been more effective that the inventories which have been quickly thrown together. The correlations with measures of achievement vary from approximately zero to an upper limit which is usually not above .50.

(3) It is clear that a variety of relatively independent predictors

has been presented.

(4) Measures of anxiety which have been used so far have not been effective for prediction of school achievement. The authors of such scales have not necessarily intended them for this purpose, but other workers have tested the hypothesis that anxiety measures

may predict achievement. The results tend to be negative. (5) Although the hypotheses have not been fully tested so far, there is inherent in the reports a clear suggestion that the devices which are useful for prediction of achievement will also be useful for prediction of continuation in school and completion of an appropriete propriete pr propriate program of studies, as indicated, for example, by college

DEVELOPMENT OF THE TEST

The California Study Methods Survey (7), used in the present research, is the end-result of a series of investigations begun in 1946. The first report (1), published in 1948, indicated that a set of questions, based upon analysis of psychological studies of learning, and dealing with methods of study, was effective in predicting school achievement. Data were based upon group intelligence tests and standardized achievement tests, used with more than six hundred high-school freshmen. The second report (2) showed that the same technique was effective for predicting grades in college courses. In these studies, the inventories used consisted of questions which discriminated reliably between high and low achievers.

The third report (3) was based upon a series of factor analyses, using data from a group of two hundred college students. These studies showed that the inventory might be scored so as to yield four independent part-scores. On the basis of inspection of factor loadings, the measures seemed to be:

(1) A measure of morale and personal adjustment in the academic situation.

(2) A measure of scholarly drives and values, or of intellectual curiosity.

(3) A measure of mechanics of study procedure.

(4) A measure of the tendency of the individual to be planful and systematic about getting school work done. It was clear from these early studies that the attitude measures (Factors 1 and 2) were more effective for predicting achievement than were the measures of mechanics of study procedure.

The fourth and fifth studies (4, 5) in the series were concerned with the development of a diagnostic scheme for scoring the inventory. The attempt was successful, and the studies incidentally

confirmed the findings of the earlier reports.

The sixth study (6) attacked the problem of improving the Validity of the weakest part of the inventory, i.e., the part concerned with the mechanics of study procedure. By testing two groups of over 1000 students each, a new key was developed and cross validated. The data showed that not only the attitude scores, but also the scores concerned with mechanics of study, were valid for predicting school achievement.

THE PRESENT STUDY

In the present study, data were collected from over 3000 students in four high schools. Grade-point averages were computed; intelligence tests and study methods tests were used as predictors. For reasons of economy, the analysis is limited to three random samplings of the data.

Table I presents results obtained in a high school of about 500 students in a small coastal town in California. The 116 students included all of those in grade eleven for whom records were complete. The correlations in the table show that the best predictor of grade-point ratio was the IQ from a verbal intelligence test, the correlation being .66. The second-best predictor was the Study Survey total score, where the correlation was .60.

Table II presents results obtained in a large city high school. Data were analyzed for a sample of 239 students in grade ten; this was a random selection of about a third of the class. Here the best predictor is the Study Survey total score, with a correlation of .60. The ACE total score is third, with a correlation of .53.

Table III shows the findings obtained in a second large urban high school. The data confirm the results of Table II. Here again the Study Survey gives a better prediction of grades than is furnished by the ACE intelligence test.

In the three high schools, the multiple correlations are .74, .68, and .66 respectively. These correlations indicate the extent to

TABLE I.—CORRELATIONS OF GRADE-POINT AVERAGES WITH INTELLIGENCE
IN GRADE 11 IN A SMALL CALIFORNIA HIGH SCHOOL

Scores f	r with IQ	r with G.P.A
Scores from the California Study Methods Survey: Factor 1. Attitude toward school Factor 2. Mechanics of study Factor 3. Planning and system Total Study Survey Score Henmon-Nelson IQ Partial r of G.P.A. with IQ, holding Study Survey Total score constant Partial r of G.P.A. with Study Survey Total Score, holding IQ constant Multiple R of G.P.A. with combined IQ and Study Survey Total Score	.48 .44 .13 .44	.60 .53 .40 .60 .66 .55

Table II.—Correlations of Grade-Point Averages with Intelligence Test Scores and with Study Survey Scores. Data from 239 Students in Grade 10 in a Large California High School

	r with ACE	r with G.P.A.
Scores from the California Study Methods Survey: 1. Attitude toward school 2. Mechanics of study 3. Planning and system 4. Total Study Survey Score Total score, ACE Intelligence Test Partial r of G.P.A. with ACE total score, holding Study Survey Total Score constant Partial r of G.P.A. with Study Survey Total score, holding ACE total score constant Multiple R of G.P.A. with combined ACE total score and Study Survey total score	.34 .42 .16 .38	.56 .52 .43 .60 .53 .40 .51

TABLE III.—CORRELATIONS OF GRADE-POINT AVERAGES WITH INTELLI-GENCE TEST SCORES AND WITH STUDY SURVEY SCORES. DATA FROM 211 STUDENTS IN GRADE 10 IN A CALIFORNIA HIGH SCHOOL

	r with ACE	r with G.P.A.
Scores from the California Study Methods Survey: 1. Attitude toward school 2. Mechanics of Study procedure 3. Planning and System 4. Total Score ACE Intelligence Test Total Score Partial correlations: Partial r of G.P.A. with ACE total score, holding Study Survey Total Score constant Partial r of G.P.A. with Study Survey Total score, holding ACE total score constant Multiple R of G.P.A. with combined ACE total score and Study Survey total score	.32 .41 01 .31	.58 .50 .36 .57 .50 .41 .50

which the combination of intelligence test and personality inventory predicts grades achieved in the high school.

In each of the three tables, the partial correlations show that the intelligence test and the Study Survey make substantial independent contributions to the prediction of school achievement.

The pattern of results in the three tables is consistent, and is representative of what has been obtained in earlier studies. The

multiple correlations rise significantly above the higher of the zero-order r's, and it appears that the two predictors are sufficient to explain approximately fifty per cent of the variance in achievement as measured by grade-point averages. Incidentally, it has been found that these grade-point averages, based upon about one year's work, are highly reliable, the reliability coefficients varying between .85 and .90.

SUMMARY, CONCLUSIONS, AND SUGGESTIONS

The latest revision of the California Study Methods Survey has been administered to new samples of students in three high schools. A cross-validation study shows that not only the attitude factors, but also the scores for mechanics of study and efficient use of time are effective predictors of high-school achievement. The Study Methods Survey predicts school achievement about as well as do the commonly-used group intelligence tests. Partial and multiple correlation analysis shows that the inventory of study methods makes an independent contribution to prediction of grade-point

It seems appropriate at this time to raise a further question. Will the various scores provided by the Study Methods Survey help to predict persistence in school and attendance at college? This seems to be an important question to be answered in further re-

REFERENCES

(1) Harold D. Carter, "Methods of learning as factors in the prediction school success," The Land of the prediction of t of school success." The Journal of Psychology, 1948, 26: 249-258.

- (2) ____, "Correlations between intelligence tests, study methods tests, d marks in a college tests and the state of Psychology, 1948, 26: 249-250. and marks in a college course." The Journal of Psychology, 30: 333-340, 1950. (3) ___, "What are some of the basic problems in analysis of study chniques?" California | 170-174, techniques?" California Journal of Educational Research, II: No. 4, 170-174,
- (4) ____, "Cross-validation of a study methods test." California Journal of Educational Research, IV: No. 1, 32-36, 1953.

(5) —, "Development of a diagnostic scoring scheme for a study meth-s test." California Issued a diagnostic scoring scheme for a study methods test." California Journal of Educational Research, VI: No. 1, 26-32,

(6) —, "The mechanics of study procedure." California Journal of Educational Research, IX: No. 1, 8-13, 1958.

(7) —, The California Study Methods Survey, Los Angeles, California: California Test Bureau, 1958.

(8) John D. Krumboltz, "Measuring achievement motivation—a review," urnal of Counseling Perukalan Journal of Counseling Psychology, 4: 191-198, 1957.

OCCUPATION AND EDUCATIONAL VALUES AMONG MEMBERS OF THREE ILLINOIS SCHOOL BOARDS

W. W. CHARTERS, JR.

Washington University

A common assumption in research on school board members is that occupational class is an important determinant of the member's attitudes and behavior as he fills his official position. George Counts in 1927 argued that business and professional people approach educational issues in terms of the vested interests of their occupation which commit them, he insisted, to policies of preserving the status quo in the community.1 By showing that school committees in America are composed predominantly of business and professional men, he concluded that the public schools necessarily are governed by conservative policies. In more recent years the same assumption has been invoked in elaborated form by Brookover:

It seems unlikely that school boards, composed of higher-status people and influenced as they apparently are by persons with similar interests, would knowingly initiate an educational program which would result in major changes in the class structure. In this respect the school boards and their associates in control are desirous of maintaining the status quo....

In other areas the agencies of school control are likely to seek those ends agreeable to the status and occupational groups with which they are identified. fied. The professionals want their own children to receive the type of academic training that will prepare them for higher levels of college and professional training....The business-management interests among the controls. trolling group will have similar desires for their own children....Generally businessmen want [children of working-class families] to receive a type of train: training that will make them efficient and tractable workmen in their offices, stores, and factories. Along with this, such school boards would like to have the children of working-class parents well indoctrinated with the businessman's point of view in regard to the capitalistic system and the relations of management and labor.2

Wilbur B. Brookover, A Sociology of Education, New York: American

Book Company, 1955, p. 65.

George S. Counts, "The Social Composition of Boards of Education: A Study in the Social Control of Public Education," Supplementary Educational As tional Monographs, Number 33, July, 1927.

The basic assumption of these arguments, rephrased in social psychological language, holds that a person's occupational class serves as his dominant reference group, providing the normative standards by which he acts as a school board member.³

Common experience as well as empirical research suggests that this assumption is at best an over-simplification. Any one of a variety of community groups may provide board members with frames of reference for perceiving educational issues, from religious, patriotic, political, and parents' groups to the education profession and the school board itself. The recent study by Gross and his associates indicates the multiplicity of community reference groups which can govern the educational perspectives of school officials and shows that the direction of the influences may not be uniform but may well be counter to one another. Significantly, the Gross study demonstrated that differences in school board functioning depend importantly upon whether the members are motivated to perform a "civic duty" or to "represent a certain group" or "get political experience". This investigation joins with several others published over the years in illustrating the difficulty of predicting board members' educational values solely from their occupation or social class position.5

The data reported below, part of an uncompleted study of school boards in Illinois, cast further doubt upon the assumption of occupational class as a prime determinant of educational values. Members of three seven-man boards of education governing com-

Neal Gross, Ward S. Mason, and Alexander W. McEachern, Explorations in Role Analysis: Studies of the School Superintendency Role, New York: John Wiley & Song 1950

For a review of several of these studies, see the author's "Research on Research, 47: 321-335, (January, 1954)

The author wishes to acknowledge the collaboration of Dr. Ralph V. Exline, Fels Center for Group Dynamics, University of Delaware, in conducting the study. It was begun while both were associated with the Bureau of Educational Research at the University of Illinois.

³Cf., Harold H. Kelley, "Two Functions of Reference Groups," in Guy E. Swanson, et al, (Eds.) Readings in Social Psychology, New York: Henry the assumptions involved in the argument, see the author's "Social Class view, 23: 268-283 (Fall. 1953)

munity unit school districts in a predominantly agricultural county in Central Illinois were furnished with 16 statements of school objectives for boys. (We focused on objectives for boys to reduce complexity.) They were asked, during a regular board meeting, to indicate the four "most important," the four "next most important," the four "third most important," and the four "least important" things the school should help boys do. Four statements were included among the 16 specifically keyed to the farming occupation—statements which we and five independent judges presumed to reflect the occupational values of Mid-Western farmers. The remaining statements related to general cultural values, or to values of business or professional groupings. (The 16 statements are shown in Table I, with those keyed for farmers in italics.)

After each board member ranked the statements he was asked to indicate which occupational groupings in his community would agree or disagree with the order of importance in which he had arranged the statements. Ten occupational groupings were listed:

Large business
Small business
Professional
White collar
Skilled manual workers

Semi-skilled manual workers Unskilled manual workers Farm owners and managers Farm tenants Farm laborers

Finally, the board member was instructed to indicate the occupational class to which he belonged himself.

According to the occupational self-classifications, a majority of the 19 board members were farmers—nine farm owners or managers of large holdings, one a farm tenant. (Two members were absent from one of the board meetings when data were collected and are not represented in our results.) The other nine were mainly business men or white collar workers from the small towns serving the farm area.

If the assumption regarding the relationship between occupational class and educational values is correct, we would expect, first, that statements reflecting the values of the farming occupation would appear at or near the top of the composite rankings of educational objectives in these farmer-dominated school boards and, second, that farmer board members would rank these statements higher in importance than members who were not farmers.

Our data do not confirm either of these predictions. For the

TABLE I.—ORDER OF IMPORTANCE OF STATEMENTS OF SCHOOL OBJECTIVES, AS RANKED BY NINETEEN SCHOOL BOARD MEMBERS IN CENTRAL ILLINOIS

Statement*	Composite Rank Order
The school should help boys to)	
be dependable, trustworthy and reliable	1
accordingly.	2
reason, use logic, think clearly and rationally, use facts.	3
desire knowledge, want to learn.	4
nve democratically with one's f-11	5
	6
learn ways of dealing with people.	7
be amplified. Detter and 1.4	81/2
high school.	81/2
appreciate the value of hard manual work.	10
etc. etc. etc.	11
learn how to get a job	12
learn to use the facilities of banks, buy life insurance, etc.	13
place confidence in 6	
place confidence in family doctors, lawyer, dentists,	14
develop an appreciation of it	
develop an appreciation of the natural phenomena of the physical world, such as the effects of temperature, rain, use and reneir particles.	151/2
use and repair various sorts of heavy equipment.	151/2

^{*} Statements in italics are keyed for farmers.

boards as a whole, three of the four statements keyed specifically to the farming occupation rank below the median for all 16 statements; two of them tie for last. (See Table I) Nor did farmers consistently assign a higher rank of importance to the keyed rankings were virtually identical; only one statements their ate the value of hard manual work"—was ranked first or second in importance by significantly more farmers than non-farmers. A further test showed that differences in ranking of all 16 statements (without singling out the keyed statements) between farmers and

non-farmers were no greater than could be expected by chance.⁷ Thus, the farm owners and managers and the farm tenant ranked the statements presented them no differently from board members

in other occupational groupings.

Readers familiar with the Central Illinois farm economy may wonder if the agriculturalists among the board members were "truly" farmers. In this region, farm ownership is typically on an absentce basis and farm management is commonly a large-scale business enterprise. Board members who classified themselves as "farm owners and managers of large holdings" may not have been closely identified with the farming occupation as we know it. Evidence against this point, however, is offered by board members' responses concerning the occupational groups agreeing with them. The farm owners and managers tended to believe that the three farm occupation categories among the ten—farm owners and managers, farm tenants, and farm laborers—agreed with their own rankings; in contrast, the non-farmers on the board tended to believe that these farm occupation categories disagreed with their rankings. It would seem, then, that the agriculturalists perceived themselves as close to the farm or, at least, as speaking for other occupational groupings clearly in the farming category.

It is instructive to observe, in Table I, those objectives which the board members regarded as most important for the schools to emphasize. At the top of the list are the objectives of helping boys to be "dependable, trustworthy, and reliable," and to "learn to distinguish right from wrong"—objectives which probably reflect the strong religious code in this area of rural Illinois and, too, the core moral values common to American society in general. The third and fourth ranked statements, "to reason, think clearly, and use facts," and "to desire knowledge, to want to learn," relate to the central values of the school institution itself. None of these "most important" objectives of education are associated narrowly with the farming occupation. Their selection suggests that other sources of values, other reference groups, than occupational class are influential for school board members, including cultural norms

⁷ In the interests of conserving space, neither the comparative data nor the statistical tests are presented. The critical question of whether or not the one statement out of four on which a significant difference was found is, itself, a chance phenomenon cannot be evaluated by available tests.

of American society at large and, in the case of the third and fourth statements, norms associated with the educational institution of which these respondents were legally constituted officials.

We must conclude from this and other investigations cited earlier that occupational class does not universally and invariably serve as a dominant source of values governing the attitudes and behavior of school board members. At some times and under certain circumstances it may. The prime task is to specify these circumstances through empirical research and to incorporate them in a more sophisticated proposition than the one with which we began this paper.

PREPARING FOR PROFESSIONAL TEACHING

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The rôle of the liberal arts college in preparing students for professional teaching is a very promising one. Procedures presented here are one college's program for attempting such an achievement.

Preparing college students for professional teaching consists of completion of the regular liberal arts program, careful selection and supervision of candidates, appropriate professional courses, and

adequate student teaching experience.

The liberal arts background professionalizes preparation for elementary and secondary teaching as well as for college teaching (1). Theodore Meyer Greene in his Liberal Education Reconsidered says, "In general, the more effectively a person is liberally educated, the richer will be his own personal life, the further will he be able to develop his profession or vocation, and the more significant will be his total contribution to society."

To achieve the common goals of this liberal education, academic requirements have been established by the college to acquaint all

students with significant knowledge in these areas:

(a) Man as a human organism, emphasizing human development and behavior.

(b) The universe he inhabits, emphasizing at least one of the natural sciences, together with the history and philosophy of science.

(c) His social relationships, emphasizing the problems and achievements of our cultural heritage, modern society, and world issues.

(d) His aesthetic and personal achievements, emphasizing and correlating work in the visual arts, drama, prose, fiction, poetry, music, and the dance; in foreign language, English composition, effective speech, and physical education.

(e) His attempt to organize his experience, emphasizing an understanding of the world of values and providing an opportunity to engage in significant philosophical and religious thinking, dis-

cussion, and application.

All students, including those qualifying for elementary or sec-

ondary certification, fulfill the college requirements of 65 semester hours in this basic curriculum, demonstrate a reading ability in one foreign language, complete a 30-hour subject field major, prepare a Tutorial in the major field under the individual supervision of the appropriate faculty member, and complete the Senior General Examination

The purpose of the Senior Tutorial is to provide each student with discipline in self-directed education. During the senior year the student meets once a week with a faculty member to discuss progress on a project of her own choosing, preparatory to the writing of a research paper. This paper is defended orally before a committee of three faculty members. Tutorials are prepared in the following fields: art, biology, chemistry, drama and speech, economics, English, French, German, history, mathematics, music, philosophy, political science, psychology, sociology, and Spanish.

Superior students have additional opportunities to increase the breadth of their education. Sophomores who have a superior academic record and a strong preparation in the language of the country concerned are permitted to apply for admission to one of the various junior-year-abroad programs. Juniors with a strong background in political science and proved ability to do independent study are eligible for a semester in residence at American University in Washington, D. C.

Chapel Public Occasions provide the privilege of seeing and hearing American and foreign leaders in a number of fields. These addresses are followed by informal seminars with the visitors in which both faculty and students may further clarify for themselves

the ideas and positions represented.

In accepting students interested in elementary or secondary education certification, the Admissions Office and the Education Department consider these evidences of probable success in teach-

(a) Emotional stability (elementary, secondary, and college record).

(b) Moral and ethical fitness (references and personality tests).

(c) General intelligence (Army General Classification Test scores show teachers between 110 and 140 (10th to 90th percentile) with the median score 124; score 140 is about equal to an IQ of

(d) Demonstrated ability to work with children or young people (precollege and college record).

(e) Scholastic achievement (cumulative record, including the

College Board Scholastic Aptitude Test).

(f) Professional interest and motivation (interviews supported by psychological tests administered by the college Office of Evaluation services) (3).

Early attention is given to determining suitable candidates for college teaching and guiding them in such preparation. However, this discussion is concerned primarily with elementary and sec-

ondary teaching.

Retention in education is determined by a faculty committee consisting of Education Department members, a representative from the subject field of the candidate, and a guidance member appointed by the Dean of the College. Duties of the committee (4), headed by the department chairman, are as follows:

(a) Assistance as appropriate in freshman orientation.

(b) Periodic reviews before admission to

(1) Educational psychology and the history and philosophy of education in the sophomore year. Prerequisite: Human Development and Behavior in the freshman year.

(2) Methods courses, including guidance and evaluation, in

the junior year.

(3) Student teaching and educational sociology in the senior year.

(c) Attention to grade-point averages, quality of written and spoken English, and potentiality as professional teachers. There can be no successful teaching without sound scholarship (5).

Student teaching, if it is to be an internship comparable to that of the other professions, requires an adequate experience in responsible teaching at the elementary or secondary level. Elements of this experience consist of guided observation and student teaching a ing, frequent conferences and critiques, training in the techniques of research, and the analysis and discussion of problems of teaching ing approached historically, sociologically, and philosophically. The time involved is full day and the scope includes, besides classroom teaching, coöperation in administration, guidance, and school and community activities; the place, Pittsburgh Public Schools.

Full advantage is taken of the community resources of Pittsburgh. Faculty members supervise such experiences as church school class teaching, Y.W.C.A. counselor work, summer camp counselor activities, underprivileged local group leader-advisorships, children's theatre, nursery school, planetarium guide teaching, tutoring of retarded children, acting as governess, fellowships, civic and political participation, projectionist training in the college Audio-Visual Materials Center, and on-the-job experience in areas of future employment.

For those students, then, desiring certification in elementary or secondary education, the college endeavors to develop professionally adjusted and responsible teachers who will contribute to the improvement of our society. To accomplish this the prospective teacher is assisted in understanding the individual and his environment, the curriculum, and the function of teaching, in formulating her own philosophy of education, and in demonstrating competency in the elementary or secondary field.

Granting of the baccalaureate degree, recommendation for certification, placement in a school or enrollment for graduate study, and follow-up to assist in position or advanced study and to reveal strengths and weaknesses in the college program complete this process of preparing students for professional teaching.

(1) Theodore M. Greene, Liberal Education Reconsidered, Cambridge, Massachusetts: Harvard University Press, 1953, pp. 2-11, 24-45.

(2) Lee J. Cronbach, Educational Psychology, New York: Harcourt,

Brace and Company, 1954, p. 194.

(3) Chatham College, Pittsburgh, Pennsylvania, Bulletin 1968-1969, P. 146.

(4) Ruth A. Stout, "Admissions and Retention Practices in College Programs of Teacher Education," The Personnel and Guidance Journal, XXXIV: 4 (December, 1955), pp. 208-212.

(6) E. H. Taylor and C. N. Mills, Arithmetic, New York: Henry Holt and Company, 1955, p. viii.

THE RELATIONSHIP OF FACT AND THEORY IN RESEARCH

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The average man thinks the scientist deals with facts and the philosopher is concerned with theorizing. To the layman, facts and theories are diametrical opposites. He thinks facts are definite, real, concrete and their meaning is self-evident. Theories, in his opinion, are mere speculations that cannot become facts until

sufficient proof is found to support them.

The scientist knows that isolated, random facts can contribute little to the advancement of knowledge. Consequently, he does not rely solely on induction—observing facts, but also engages in deduction—theorizing about facts. Realizing that facts do not speak for themselves, he tries to see relationships between facts or some way of ordering them in a meaningful way. The scientist holds that theories and facts are reciprocally interdependent. That is, theories are not mere speculations, for they are built upon facts; and when facts are gathered, ordered, and seen in relationship, they constitute a theory. Theories provide natural and logical explanations for facts.

Because theorizing plays a much greater rôle in research than most people realize, the following paragraphs will explore some of the ways it contributes to the advancement of knowledge.

Theory defines the relevancy of facts. To do research, man must determine what kind of phenomena they should study. Scientists cannot collect facts about everything. They must narrow the area of their interest. For example, investigators may study the game of baseball in the sociological framework of play, or in the physical framework of stress and velocity, or in the economic framework of supply and demand. By constructing a specific theoretical framework for their investigations, scientists determine what kind of facts are relevant to each study. Facts do not identify themselves as relevant, only a theory can do that.

Theory develops systems of classification and a structure of concepts. Every science develops a structural foundation to facilitate research. Scientists in each field construct theoretical

frameworks for classifying their facts. Geologists develop systems for classifying rocks, and botanists develop systems for classifying plant life. Research workers in each field also develop certain terms or concepts which serve as short hand symbols that represent major processes or objects in a given subject matter. These concepts make it easier for scientists to communicate their findings. These specialized scientific vocabularies often are unintelligible to the layman, but the concepts or short hand symbols convey considerable compact information to the scientist. If scientists did not develop theoretical structures, he would be seriously handicapped in his work and unable to advance knowledge.

Theory summarizes facts. Theorization is used to summarize the fundamental knowledge within a given field. These summaries range from relatively simple generalizations to exceedingly complex theoretical relationships. A summarization may merely describe the observations man makes of a given phenomena. For example, in a study concerning the practice of granting varsity letters, an investigator may summarize his observations in a set of descriptions. On a somewhat higher level of summarization, an investigator may construct generalizations about the relationships between phenomena. For example, he may summarize the relationship between varsity letters, honor rolls, certificates of achievement, and honor societies by generalizing that these phenomena are means of motivating pupils or means of giving recognition for high attainment. Theorizing on a still higher level may lead to an attempt to integrate some of the major empirical generalizations made by scientists into a more comprehensive theoretical framework. Einstein endeavored to do this is his theory of relativity.

Theory predicts facts. A generalization about data made by the of unobserved instances conforming to the generalization. For instance, educational psychologists have made the following generalizations: When children learn a baseball-throwing skill much cational psychologists can predict that a child learning stages. Thus, educational psychologists can predict that a child learning any similar they can predict that where children have practiced these skills, Theory, therefore, can predict where no data is presently available. Theory directs the attention of research workers to particular

phenomena. It tells him what facts he should be able to observe. Thus, theory is a powerful beacon that scientists can use to extend knowledge

Theory points out need for further research. Since theories generalize about known facts and predict facts, they also indicate areas where knowledge is deficient. Theories, particularly in the social sciences, may lack supporting evidence in one or more aspects. Such theories need further supporting evidence to provide the maturity and vitality essential for their proper functioning. Because theories suggest where evidence is lacking, they are an excellent source to turn to when in search of research problems.

In pushing back the frontiers of knowledge, scientists are very dependent upon the process of theorization, but they cannot construct or confirm any theory without the aid of facts. Theories and facts interact constantly. One depends upon the other. They are

inextricably interwoven.

Facts stimulate theorization. The history of science is replete with instances of simple observations of facts that have led to well-known advances in human knowledge. For instance, when Archimedes observed water overflowing while he was taking a bath, he grasped the principle of displacement. When Newton saw an apple fall, he developed the principle of gravitation. When Watt watched steam escape from a teakettle, he visualized the principle of steam power. Thus facts can stimulate the theorizing process. Of course, everyone is not capable of leaping from a fact to a theory; many men made the same observations as Newton, Watt and Archimedes without being intellectually stimulated. Facts can only initiate theorization when an alert, disciplined, and imaginative mind observes them and mentally constructs a possible explanation for them.

Facts test theories. Facts determine whether a theory can be confirmed or should be rejected or reformulated. After constructing a theory about some aspects of learning, an educator may find many facts that conform to his theory. These facts tend to strengthen the theory. However, the educator may find facts that do not confirm the theory. These facts indicate a need for either rejecting the theory or reformulating it to fit the new facts. It is upon facts that theories eventually must adjust.

Facts clarify theories. Theories are refined and clarified as knowledge accumulates. For example, theories in the new social

sciences are apt to be elusive and ill-defined. But further observation and experimentation may reveal facts that not only agree with the theory, but also state in detail and with precision what the theory states in a general way. Thus, facts help in clarifying and redefining theory.

In summary, there is a constant and intricate relationship between fact and theory. Facts without theory or theory without facts lack significance. Facts take their significance from the theories which define, classify, summarize, and predict them. Theories possess significance when they are built upon, clarified, and tested by facts. Thus, the growth of science is dependent upon the accumulation of pertinent facts and the formulation of new or broader theories.

WHY SHOULD PUBLIC SCHOOLS ACCEPT STUDENT TEACHERS?

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Perhaps the most significant change that teacher education has made in the past ten years is the utilization of off-campus public schools for a practice-teaching laboratory. Among the major reasons for the exodus from campus laboratory schools to public schools are that (1) laboratory schools are expensive, (2) laboratory school classrooms were overloaded with student teachers, (3) public schools provide a more realistic teaching situation.

The wisdom of moving to public schools for student teaching has not been seriously questioned. Therefore, this movement has snow-balled and will continue to include more public schools as time passes. As enrollments in colleges of education increase during the next decade, so will efforts to accommodate the parallel growth in numbers of student teachers. This expansion should and must be in the direction of college-public school coöperation. There is no other way in which a sound and effective teachereducation program can go. Today, there is also a marked increase in the use of public schools in all phases of the teacher-education sequence of laboratory courses.

But why should public schools assist in the preparation of prospective teachers? Tax-supported public schools exist to provide self-realization, human relationships, and the development of civic responsibility in the most economically efficient way possible. What, then, do these objectives have to do with teacher

education?

(1) Colleges seek the public schools which are outstanding for practice-teaching laboratories. Public schools which conduct medicar diocre programs are usually not invited by a college to cooperate in preparing teachers. Therefore, to be invited by a teacher-prepared aration institution to participate in the business of helping the institution to participate in one of the highest compliments Which can be paid to a school, its administration, and the school community. Not only is there general praise but also specific commendation, because the teachers who are asked to cooperate

are also considered to be the best. There are, of course, outstanding schools which are not in proximity to a teacher-preparation institution.

(2) Another prime reason why public schools should participate is that schools should be eager to assume the professional responsibility. The need for teachers is great. The need for quality teachers is greater. The quality can be improved if the outstanding school systems are enthusiastic about their responsibility of helping to educate teachers. If we accept as the prime purpose of the school that of being an agency which seeks to perpetuate and to improve the culture of the society which supports the school, then there rests with each teacher and administrator the professional and intrinsic responsibility of contributing toward this over-all objective. The kind of teacher who guides student teachers enjoys his profession and is eager to be of service in training future teachers. For the truly professional teacher, then, this cooperative program does present all kinds of opportunities and challenges. Superintendents should accept leadership in the development of student-teaching programs as one of their most important responsibilities. The increase in the number of cooperating public schools indicates that this vital phase of preparing teachers is being accepted by administrators and teachers.

(3) Public school programs are improved as teachers work with student teachers. Public school coöperation is a two-way street. Teachers and teacher-training schools certainly offer a great deal to the student. Not only because such schools serve as a laboratory for teachers to evaluate their ability as teachers but also because of the practical and earnest education that student teachers find in the school. A second advantage is gained by the local school because the presence of student teachers makes teachers a little sharper in evaluating their own teaching. Teachers have the opportunity to compare the many ways they have been doing things with those methods and activities utilized by the student teachers. Therefore, public schools realize a spontaneous in-service program from the presence of student teachers. Some cooperating schools had ating schools hold workshops for cooperating teachers to capitalize on this opportunity for in-service growth. This aspect of improving the quality of instruction should warrant superintendents to provide a budget item for an in-service program. All these

facts are relevant to the observed trend toward the school system itself becoming the focal center for the in-service education of teachers.

(4) Another significant reason why public schools should coöperate with teacher-training institutions is that recruitment is facilitated. The colleges are increasing their selective admission and selective retention practices which insure more promising student-teachers. These selected persons are young, able, and promising. Public school pupils are motivated toward teaching by having educational experiences with young, enthusiastic, and able men and women as student teachers. This early motivation will tend to help the nation in what is considered its number one educational problem: getting a sufficient number of qualified teach-

ers for the classroom.

(5) Off-campus student teaching affords the coöperating public schools an outstanding public relations and advertising avenue. Practice teaching is considered to be at the pinnacle of teachereducation training. It is here that the student teacher has the opportunity to implement the philosophy, principles, and devices which he has accumulated during his previous formal training. The student teacher returns to his campus, writes letters to his family and friends, and discusses the highlights of his teaching experience at a certain school. Usually, this is related in a prideful manner which enhances the reputation of the school. The college likewise enjoys improved public relations from having good students in the neighboring towns.

(6) Allowing prospective teachers to receive part of their teacher education in the public schools is an improvement over an education which is given exclusively on the college campus. Public school experience provides a more practical education. Student teachers, for the most part, upon graduation, will accept teaching contracts in the public schools. What could be better experience than public school student teaching as a preparation for Public school services? Therefore, if our school men want competent and qualified teachers to staff the classrooms, they can contribute by cooperating with teacher-education student-teach-

ing programs.

(7) Laboratory schools are needed for experimental educational research from which all schools could benefit. Educational research frontiers are expanding, and laboratories for this crucial work are needed. Researchers will be better able to experiment with many aspects of the teaching-learning situation in which student teachers are not able to assist. The many theories which are being advanced regarding methods in the specific subjects, core organization, ability groupings, and similar topics need to be tested. The laboratory school is an ideal site for this work because of the proximity of good professional libraries, and the availability of persons to design and conduct the work; also, usually,

money for such work is included in the college budget.

(8) The final reason why schools should aid in the preparation of teachers is perhaps the most important. A line of communication is offered from the school to the college. In this way the traditional conflict between the intellectual and the practical approaches tends to be resolved. There are few school administrators who do not have some suggestions on how teacher education ought to be changed or improved. In a student-teaching center, the administration has a natural and a powerful tool for making suggestions for improvement. As a result of such a program, a closer and better line of communication between the college and the school exists. This degree of greater functional relationship consequently can only be to the advantage of teacher education, both in-service and pre-service.

SUMMARY

Among the reasons why public schools should accept practice teachers are the following:

(1) The invitation to participate is a compliment both to the

school and the teacher.

(2) To assist in the preparation of teachers is a professional responsibility for educators to assume.

(3) Practice teachers in a school provide a spontaneous in-

service program.

(4) Youthful and enthusiastic student teachers offer recruitment sources for more and better teachers.

(5) The local school benefits from the favorable public relations which student teachers create for the school.

(6) Public-school student teaching provides more practical training than laboratory-school student teaching.

- (7) Off-campus student teaching will free laboratory schools for needed classroom research.
- (8) School administrators are offered an opportunity to coöperate with teacher-education authorities in the improvement of teacher education.

TEACHING COMBINATIONS OF INDUSTRIAL ARTS TEACHERS IN OHIO

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Accurate information concerning the character of teaching assignments of industrial arts teachers in any locality or state is of vital interest to school administrators, supervisors, teachers, and industrial teacher educators. One of the more common problems of local supervisors of industrial education and suprintendents is the assignment of teaching combinations, if any, to industrial arts teachers in their school system.

Of all of the many questions asked by teachers in training, one of the most common is the question of teaching combinations. Such questions as "Do industrial arts teachers teach other subjects?", "If so, what other subjects?", and "How often?" are frequently asked by most persons interested in that phase of the school program.

During the spring of 1958 as a part of a study¹ of the status of industrial arts in the public secondary schools in Ohio, information on the question of teaching combinations was received from 1533 industrial arts teachers. This number represents approximately 82 per cent of all the industrial arts teachers in public schools in Ohio. The findings presented in this article deal only with the frequency with which industrial arts teachers teach other subjects. These findings are presented for the total sample and have also been analyzed according to type of school district in order to show the differences which occur in the different teaching situations.

Table I shows the frequency and percentage with which industrial arts teachers teach other subjects.

A perusal of this table reveals that of the 1533 teachers reporting approximately 73 per cent teach only industrial arts. The fact that 7 out of every 10 teachers of industrial arts in the secondary schools of Ohio teach only industrial arts has real meaning for teacher educators, especially when planning for minors in the undergraduate program.

¹ E. R. Towers and W. E. Ray, The Status of Industrial Arts in the Public Secondary Schools of Ohio. Bureau of Educational Research and Service, The Ohio State University, 1959, pp. ix + 78.

TABLE I.—FREQUENCY AND PERCENTAGE OF TEACHING COMBINATIONS OF INDUSTRIAL ARTS TEACHERS

Combination	No. of Teachers N = 1533	Percentage	72.7 91.4 97.7 99.5 99.9 100.0	
A. Plus One Other A. Plus Two Others A. Plus Three Others A. Plus Four Others A. Plus Four Others A. Plus Five Others	1115 287 97 27 6	72.7 18.7 6.3 1.8 0.4 0.1		

To Be Read: Of the 1533 Industrial Arts teachers reporting, 27 taught Industrial Arts plus 3 other subjects—1.8 per cent of the total.

TABLE II.—OTHER COURSES TAUGHT BY INDUSTRIAL ARTS TEACHERS:
BY TOTAL SAMPLE AND TYPE OF DISTRICT

			Type of District					
Subject Taught	Total Sample N = 1533		City N = 876		County N = 523		Ex. Village N = 100	
	f	%	f	%	f	%	j	%
Industrial Arts Only Driver Education Mathematics Social Studies Science Physical Education Health Agriculture Trade and Industrial Edu-	1115 120 106 97 88 68 22 19	72.7 7.8 6.9 6.3 5.7 4.4 1.4 1.2	716 37 47 36 32 17 7 3	81.7 4.2 5.4 4.1 3.7 1.9 0.8 0.3 2.1	300 70 50 57 49 46 14 15	57.4 13.4 9.6 10.9 9.4 8.8 2.7 2.9 0.2	72 10 8 1 6 4 1 0	72.0 10.0 8.0 1.0 6.0 4.0 1.0 0.0
cation Art English Business Education Speech and Drama Foreign Language	17 16 6 3 1	1.1 1.1 0.4 0.2 0.1	8 6 1 1 0	0.9 0.7 0.1 0.1 0.0	4 7 4 2 1	0.8 1.3 0.8 0.4 0.2	4 1 1 0 0	4.0 1.0 1.0 0.0 0.0

To Be Read: Of Industrial Arts teachers in city schools who reported on other courses which they taught, 716, or 81.7 per cent, reported that they taught only Industrial Arts.

Table II presents the data by total sample and categorized by type of district as regards the frequency of the other courses taught by industrial arts teachers. It can be seen that of the other subjects taught by industrial arts teachers, driver education, mathematics, social studies, science, and physical education are the most common.

It should be noted that in Ohio, of all the teachers reporting, only 1.2 per cent reported a combination of industrial arts with trade and industrial education. This is somewhat different than in other Midwestern states where there is a greater incidence of this combination.² However, this situation in Ohio is no doubt a manifestation of the separation of these two programs in teacher education institutions of Ohio, the State Department of Education, and professional organizations at the state level.

A further investigation of Table II reveals that there is little difference in teaching combinations between the city and exempted village systems, except with regard to trade and industrial education. However, over 40 per cent of the teachers in the county school

systems are teachers of other subjects.

It is often assumed that greater teacher efficiency results if a teacher only teaches in his major field. If this assumption is valid, then it appears from the results presented in this report that a large portion of industrial arts teachers in Ohio have the opportunity to exert full time teaching effort to their major teaching field.

For example, in a study in the State of Illinois published in 1952, approximately 18 per cent of the teachers had a teaching combination of industrial arts and trade and industrial education. A. B. Mays and R. N. Evans, Industrial Arts in Illinois Schools, Bureau of Research and Service, University of Illinois Bulletin, Volume 49, No. 59, April, 1952, pp. 17.

RELATIONSHIP OF TEACHING APTITUDE TO AGE, SEX, AND CLASSIFICATION OF STUDENTS AT SOUTHERN UNIVERSITY

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There seems to be little agreement among college administrators on a single instrument to serve as a criterion for the preselection of students entering Teacher-Education. Barr (1) suggests "that teaching is a complex activity conditioned by an equally complex matrix of abilities of which intellectualized verbal ability would appear to be one or one group of abilities." Several instruments and devices have been used; among them, college entrance examinations, intelligence test scores, high school scholastic achievement, general achievement test scores, and professional aptitude tests. Archer (2) contends that as many of these measures as possible should be combined to get the greatest predictive value.

In view of the fact that preselection for Teacher-Education must be based on some form of prediction of probable success in teaching, this study was undertaken to determine the advisability of the adoption of an additional criterion, the teaching aptitude test, as a basis for such preselection. The present practice at Southern University is to admit students to the Division of Education on the basis of interest in teaching as manifested by the student at the close of his or her Freshman year at the University.

Seagoe (3) reports, that, alone, interest is a rather dubious criterion for success in teaching. Currently, within the Division of Education, selection is practiced on the basis of three criteria; general academic average, professional education achievement average, and Comprehensive Subject Matter Examination Scores. Where there is an absence of any recorded material on the teaching aptitude of Southern University students or other students similarly situated in state-supported institutions of higher learning primarily for Negroes, it was felt that information on the aptitude

of students would contribute materially to the knowledge of students' potential.

From a review of earlier investigations, it would seem that in almost every instance the researchers have attempted to establish one or the other of the Aptitude tests as a single criterion of teaching success. Barr (4) calls attention to the need for more objective studies of the validity and reliability of various measures that are considered to have predictive value in the selection of prospective teachers.

THE MEASURING DEVICE

The George Washington University Test of Teaching Aptitude by F. A. Moss, T. Hunt, and F. C. Wallace was first copyrighted in 1927 by the Center for Psychological Service. The test is divided into five parts:

Test 1-Judgment in Teaching Situations

Test 2—Reasoning and Information Concerning School Problems

Test 3—Comprehension and Retention

Test 4—Observation and Recall

Test 5—Recognition of Mental States from Facial Expressions It is worthy of mention that the questions in Test 3 and Test 4 are based on separate materials given to the students to read and to observe prior to the beginning of the written part of the test. This test has been the instrument used in several investigations with Seagoe (5) reporting correlations of 0.19 and below with grades given to students for student teaching by critic teachers. ers. Seagoe reports further that "an important contribution of the test is its attempt to get away from entirely verbal and remote abstractions and to devise practical situations requiring the application of judgment and professional information." She concludes that the cludes that the test can be a very useful instrument for research.

METHOD OF PROCEDURE

The George Washington University Test of Teaching Aptitude, Form 1, was administered to three hundred fifty-three students primarily enrolled in the primarily enrolled in the students of primarily enrolled in the courses, Introduction to Education, Principles of Secondary Division in the courses, Introduction to Education, Sciciples of Secondary Education and Methods in Elementary Science and Math ence and Mathematics. Introduction to Education is one of the first professional adfirst professional education courses for students planning to major in some area of Secondary or Elementary Education as a principal teaching field.

Test scores were compiled in the following major categories: Age groups, classes, and sex. The mean scores, standard deviations, ranges, and coefficients of variability were computed for each of the categories. Variability of the mean scores and the significance of the difference between mean scores for the various subgroups were determined by use of the critical ratios, t and F.

ANALYSIS OF DATA

The means, standard deviations, ranges, and coefficients of variability for each category are shown in Table I. The highest individual score made on the test was 151 (highest possible score 200), with a total of three students making this score. The lowest score made by any student on this test was twenty-four (lowest possible score being zero), with one student making this score. The total range of scores was 130, computed from the midpoints of the highest and lowest class intervals. The mean score for the total

TABLE I.—SUMMARY OF MEANS, STANDARD DEVIATIONS, RANGES, AND COEFFICIENTS OF VARIABILITY OF SCORES ON THE GEORGE WASHINGTON UNIVERSITY TEST OF TEACHING APTITUDE MADE BY 353 STUDENTS AT SOUTHERN UNIVERSITY

Groups	Number	Mean	Standard Deviation	Range	Coefficient of Variability, (per cent)
Scores by Sex Men Women Total Scores by Age Groups 18-20 years 21-23 years 24-26 years 27-29 years 30 years and over Scores by Classes Seniors Juniors	121 232 353 116 153 55 22 7 41 175	89.13 94.50 92.80 94.24 90.58 92.68 93.14 112.55 97.67 96.72	22.00 23.10 22.90 22.80 21.60 21.20 33.80 13.81 23.10 21.70	130 120 130 117 111 125 109 41 111 105 127	24.88 24.34 24.68 24.19 23.73 22.88 36.27 11.29 23.46 22.78 27.58
Juniors Sophomores Freshmen	1		2	1.70 4.00 0.70	4.00 127

group was 92.80 with a standard deviation of 22.90 and a coeffi-

cient of variability of 24.68 per cent.

Comparisons by Sex. Table I shows, again, that the mean score for men was 89.13, with a standard deviation of 22.00. The range of scores for men was 130 which is identical with the range for the total group, suggesting that both the lowest and the highest scores were made by the men. The mean score for the women was 94.50 with a standard deviation of 23.10. The range of scores for women was 120 which is ten points smaller than the range for the total group. The critical ratio between the mean score for men and the mean score for women was t = 2.12 which is significant at the 5 per cent level of confidence. Actually such a critical ratio suggests that only in 36 cases out of a thousand could such a difference in the means be due to chance. The difference between the mean for men and the mean for women produced a F ratio of 1.09 which is not significant at the 5 per cent level of confidence and indicates that the mean scores are not from heterogeneous populations. Though the range of scores for women is ten points smaller than the range of scores for men it will be observed that the standard deviation of the mean for women is greater than the standard deviation of the mean for men. Coefficients of variability of 24.68 and 24.34, for men and women, respectively, seem to substantiate the hypothesis of greater variability among the scores for men.

The mean scores of neither the men nor the women varies significantly from the mean score of the total group despite the fact that their mean scores vary significantly from each other, the score for women being significantly higher than the score for men. Women, then, presently enrolled at the University and as far as is determined by this test, would seem to exhibit a greater aptitude for teaching than men though they vary greatly among themselves in this aptitude.

Comparisons by Age Groups. The means, standard deviations, ranges, and coefficients of variability of scores by age groups is presented in Table I. The scores were grouped by ages as follows: Group 1, 30 years of age and over: Group 2, 27–29 years of age; Group 3, 24–26 years of age; Group 4, 21–23 years of age; Group 5, 18–20 years of age. It is of some importance to report that four of the persons in Group 1 had some previous teaching experience varying from two to five years, though in all except one instance

these persons did not hold the baccalaureate degree, and therefore, were not regularly certified for teaching in the state.

Mean scores for the groups were: 112.55, 93.14, 92.68, 90.58, and 94.24, respectively, for the groups one to five in that order. Standard deviations were: 13.81, 33.80, 21.20, 21.60, and 22.80, respectively. An examination of the coefficients of variability shows that variability was greatest among the 27-29 year-olds, and least

among the above 30 year-olds.

Differences between the mean scores of group 1 and groups 3, 4, and 5, yield critical ratios of 3.32, 3.98, and 3.22, respectively, which are highly significant at the 1 per cent level of confidence. However, the difference between the mean of group 5 and group 4 yields a critical ratio of 2.14, which is significant at the 5 per cent level of confidence. Critical ratios between the means of all of the other groups indicate that these differences are not significant, and significant F ratios would seem to suggest that such differences as do exist may be due to the variability of the scores in the respective groups. A significant F ratio between the means of group 1 and 2 indicates, at least in part, that the difference in the means of these two groups is due to variability in the scores within the groups. The high variability in group 2—standard deviation— 33.80 and a coefficient of variability of 36.27 per cent would seem to substantiate this observation.

The mean score for the 18-20 year-olds is higher than the mean score for the 21-23 year-olds, the 24-26 year-olds, or the 27-29 Year-olds. One explanation for this may be that, for the most part, 18 and 19 year-olds who were enrolled in these courses are students classified as Advanced Freshman who are pursuing an accelerated college program because of exceptionally high scholastic aptitude based on their work in high school. A second reason may be that in many instances older students enrolled in these courses are retarded in scholastic progress, many of whom are taking the

course for the second time.

Comparisons by Classes. The means, standard deviations, ranges and coefficients of variability are shown in Table I with an analysis of variance presented in Table II. The mean scores for the for the classes were as follows: Seniors, 97.67; Juniors, 96.72; Sophomores, 86.48; Freshmen, 83.67. Standard deviations were: 23.10, 21.70, 24.00, and 20.70, respectively, for Seniors, Juniors, Soph Sophomores, and Freshmen. Mean scores show a direct relation-

TABLE II.—ANALYSIS OF VARIANCE IN SCORES BY AGE GROUPS AND CLASSES

Age Groups	Variance				
		ı	F		
Group 1-30 & above	Groups 1 & 5	3.22**	2.72#		
Group 2—27-29	1 & 4	3.98**	2.44 #		
	1 & 3	3.32**	2.35 #		
Group 3—24–26	1 & 2	2.14*	5.99**		
	2 & 3	0.05#	2.49**		
Group 4—21–23	2 & 4	0.29 %	2.44**		
	2 & 5	0.14 %	2.19**		
Group 5—18–20	3 & 4	0.62 *	1.04 *		
	3 & 5	0.41 *	1.15 *		
Classes	4 & 5	1.33 #	1.11#		
Seniors	Senior-Junior	0.24 #	1.13 #		
	Senior-Soph.	2.56*	1.07 #		
Juniors	Senior-Fresh. Junior-Soph.	2.77** 3.52**	1.24 # 1.22 #		
Sophomores	Junior-Fresh. SophFresh.	3.38**	1.09 #		
Freshmen		0.66 #	1.34 #		

^{*} Significant at 5 per cent level * Not Significant.

ship with college experience, in so far as college classification indicates experience. Contrasted with the observation that Teaching Aptitude apparently varies little between ages 18 and 29, as shown in Table I, the assumption that aptitude increases with college experience seems valid

Examination of the critical ratios as shown in Table II reveals that the difference between the mean score of: Seniors and Freshmen; Juniors and Sophomores; Juniors and Freshmen, is highly significant at the 1 per cent level of confidence while the difference between the mean score of Seniors and Sophomores is significant at the 5 per cent level of confidence. The difference between the mean score of Sophomores and Freshmen is not significant; the difference as shown being due to chance. It should be pointed out here that the most striking contrast in mean scores occurs between the mean score for Sophomores and the mean score for Juniors. This is a highly encouraging sign in that it seems to suggest that

^{**} Significant at 1 per cent level

the whole impact of college teaching bears fruit in a higher potential aptitude for teaching by the end of the Junior year.

SUMMARY AND CONCLUSIONS

The George Washington University Test of Teaching Aptitude was administered to three hundred fifty-three students enrolled in professional education courses at Southern University during the Summer of 1956 and the Spring of 1957. Scores were analyzed for the means, standard deviations, ranges, and coefficients of variability according to sex, age groups, and classification.

The following tentative conclusions would seem suggested:

(1) Women students show a slightly higher aptitude for teach-

ing than men, on a whole.

(2) Senior students show a significantly higher degree of aptitude for teaching than Sophomores or Freshmen, but they did not score significantly higher than the Juniors.

(3) Junior students scored significantly higher than Freshmen or Sophomores and only slightly lower than Senior students.

(4) Aptitude appears to increase with college experience but shows only a slight tendency to increase with ages below twentynine.

REFERENCES

(1) A. S. Barr, "Review of Aptitude Test," Third Mental Measurement Yearbook, Ed. O. K. Buros, (New Brunswick, N. J., Rutgers University Press, 1949), Article 405.

(2) Clifford P. Archer, "Recent Trends in Teacher Selection," School and

Society, 49: 769-770, December, 1939.

(3) May V. Seagoe, "Permanence of Interest in Teaching," Journal of

Educational Research, 38: 678-684, May, 1945.

(4) A. S. Barr, "Recruitment for Teacher Training and Prediction of Teaching Success," Review of Educational Research, 10: 185-190, 1940.

(5) Seagoe, Op. cit.

THE FORTHCOMING CHANGE

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EVERYBODY FOR A CHANGE

Educators, politicians, practically everybody is making suggestions "how to improve our educational system" in order that we may be able to compete with the Russians. The irony is that the Russians are changing their educational system—and this should

serve us as a warning in our undertakings.

It is not enough to have a general support for the change but also it is necessary to avoid haste and make a change which would benefit the society in the most efficient way. The suggestions which are generally made are directed towards the changes in curriculum to give the students the opportunity to learn more of the basic skills, required of those who will be considered as educated, and who intend to enter the universities and colleges.

Today the best known suggestions are made by Dr. James B. Conant in "The American High School Today." Among the basic twenty-three suggestions he is proposing are: more years of sciences and less are the suggestions he is proposing are: more years of sciences and less are the suggestions he is proposing are: ences and languages. The idea is basically sound if properly applied

and understood.

A student who would like to master any foreign language no doubt should spend at least four years studying a language in the grade or high school, or if he wants to have some understanding of science, the four years' curriculum is hardly a bare minimum.

HOW ARE THE SCHOOLS RESPONDING?

Not to be behind the new trend several schools started to make changes in their curriculum and introduced a standardized requirement for all children ment for all students to take more courses in sciences and other fields in order to fields in order to graduate. They should be congratulated on their effort, but there is effort, but there is a danger that by raising the requirements they may not raise the general standard of learning whatsoever.

I do not see the necessity for everyone in the high school to have, for instance, four years of science, if he does not intend to concentrate in science, or if he does not have the ability to study science on a more advanced level. The general requirement without making a distinction between different purposes may be detrimental to those concerned.

In the first place, we may expect that, in order to graduate, students who may have potential abilities for studies in other fields will spend most of their time studying "the subjects they will never understand or have any use for", and may not have enough time left to concentrate on other fields of knowledge. Besides, if a student is required to accept a curriculum which he would be able to carry only with great difficulty and if he cannot make a choice from at least a few different curricula, this may create unnecessary frustration.

I do not think it is necessary for every student who intends to study in a college or university to spend, for instance, four years studying advanced courses in mathematics, which he will finally pass with an average grade, instead of concentrating more on literature, history, philosophy, or art, where he may make excellent progress. We have to remember that the curricula should be adjusted to the needs of students and not vice versa. The very fact that society wants to have more engineers and technicians is not a guarantee that we will have more because we have a proper curriculum. Our desire should be supported by a supply of more proper material to work with. Offering more courses in science will not create more technicians, it may only help to discover the abilities and help those who have the abilities to develop them. There should be plenty of opportunity for those who have capacities but it does not mean that everybody who intends to graduate from high school must have so many hours in advanced courses in science or foreign languages.

WHERE IS THE DANGER?

It seems to me that we are going to make the same mistakes which were made in many European schools half a century ago. There also was a general type high school with a standardized requirement for science and languages, regardless of what the student planned for the future. After several years of experimentation, the mistake was corrected and two general types of high schools were organized; one for those who could benefit from the curriculum which was geared to "humanities", and the second which was directed to "science".

A student who wished to enter high school was given a test after he finished the fourth grade in one of the two types of schools. After passing a test and showing promise for the future, he was accepted at the school of his choice. If after a year or two he discovered that he had made a wrong decision, it was possible for him to transfer to a different type of school. The door to either of these high schools was not tightly closed-many who entered the high schools preparing for a higher education discovered that they could not absorb the curriculum and consequently transferred to the general schools, and many from the general schools found their way to a school preparing for advanced studies.

Those who could not pass the test were admitted to a school of a general curriculum where they studied for four years a background which would allow them to enter one among many different

professional schools.

WHAT MAY WE LEARN FROM THE RUSSIANS?

Mrs. Eleanor Roosevelt in her book On My Own, describing her impressions from the Soviet Union stated that the Russians were very successful in applying Ivan Pavlov's theory of conditioned reflex to the education of children. It is true that young human beings can be conditioned. They may be taught many different things which somebody considers as important. They may be prepared to acquire a certain amount of knowledge and then perform the functions required by the state. Pavlov's ideas were quite successfully applied in the Soviet Union in the field of education. But this success is very limited.

It is true that the Russians, percentage-wise, have more technicians and engineers than we, but this does not prove the superiority of the odd. ority of the educational system or superiority in the field of science.

If we would be seen to superiority in the field of science to If we would have in the United States a commission which was to direct and select young people according to the need of the state and condition them, we could very easily double the number of

technicians and engineers.

Numbers are important for an advancement, but only to a certain degree and mostly in the field of technical advancement scientific progress, numbers are insignificant. Progress is not made by those who completed a rigid requirement for a certain amount of courses. Progress, in most cases, is created by those who are known as "single-minded" persons.

Very often we do not realize that we are eliminating many people from a given field by imposing requirements which are not necessary for success in the field. For instance, many colleges and universities require, from those who intend to enter the nursing profession, courses in chemistry and physics, amounting to about two-thirds of the courses in this field which are required for medical students. With the exception of those who are working in laboratory research, an average nurse seldom has any use for the chemistry or physics she learned in college, but she needs many other qualities to be a successful nurse. It is possible that many potential nurses are turned down on account of a curriculum which is too rigid. Do we want to close the door to higher education to those who are not able to absorb more advanced courses in sciences?

QUANTIFICATION AND STANDARDIZATION

The second trend which is noticeable and which is gaining momentum is centralization. We are tempted to compare the school unit to a business unit and very often we consider that the school, like a business enterprise, should have a certain size to be efficient. It is true that a school which is too small or too big may not be the most efficient from the point of material investment, but we should refrain from comparing our schools to business units. Not long ago, a statement was made that our schools represent the value of several billions of dollars and that such a huge investment is idle half of the time. However, investment is most efficiently used when an enterprise operates twenty-four hours a day. I do not see how it would be practically possible to operate a school on a twenty-four hour basis—unless we have big centers where buildings may be used in succession by grade, high school, and college, but even then we would not be able to operate more than sixteen hours a day.

The statement, for instance, that a school which could graduate a hundred students is the best, is of doubtful value, especially if it happened to be a school offering a standardized curriculum. In many instances, it would be much better to have two or three high schools offering a diversified program. The facilities of the big centers should be so arranged that they would provide for the best educational efficiency—that means two or three high schools under one roof, each having a different curriculum. It would be possible for such a unified high school to employ specialists and in

this way raise the standards of instruction. Besides, it would be possible to make better use of the faculty because different specialists could be used to the best advantage in a unified high school by being employed in two or three different types of high schools. For instance, a high school may have a vacancy for an instructor in French, or any other language, but does not have a curriculum asking for a full-time instructor. In a unified school, instructors would work full time because a unified school would have a big enough demand for their services.

THE REORGANIZATION

If the majority of high schools will accept and introduce the new standardized curriculum, very soon they will be criticized that they are creating a "first and second" class of high school. I do not think it is necessary to make this distinction that only a school which graduates a hundred students is a good school, because the parents will be very reluctant to accept the idea that their children are graduates from a school which is "inferior" on account of the size. We should make it clear that the changes which are taking place are directed to the recognition of abilities and needs of students and that the size is of secondary importance. If our society needs more engineers and technicians, we should have high schools with curricular which ricula which will prepare the students to enter the institutions of higher learning by offering training in science. But it would be unfair to state that a student is not a "bright" student because he is not able to study one or two more courses in science on an advanced level.

On the other hand, each student who intends to graduate from high school, regardless of the general curriculum, should have a thorough preparation in grammar and composition, no matter what he intends to study in the future. A student receiving a high school diploma should know him.

diploma should know his native language.

Today we live in the age of specialization and we need high schools which would have a curriculum suitable for those who have interest in sciences, high schools for those who would like to have a background in humanities and do not show any promise in science, and schools for those who do not or should not have "academic" ambitions.

We must remember all the time that the attempt to raise the

standard without taking proper care of those who cannot meet the standard may sooner or later bring resistance. We want and expect our high schools to offer a good academic training and this means an exclusion of all those who would not be able to absorb what is offered in the curriculum, but the curriculum should vary according to the future plans and abilities of students, and this requires at least three different types of high school with three different types of curriculum.

THE HUMAN ASPECT

Let us assume for a moment that all changes suggested by different experts have been successfully applied—does it mean that we have solved the problem of raising the standards? I think we should go one step farther—for good schools with good curricula we need good teachers. I do not want to state that we do not have good teachers—I want to stress that at the present time, many good teachers simply do not have the time to be good teachers.

Very often, one gets the impression that teaching is a side-line. It is understandable that a teacher must be available for teaching, but he also must be available for chaperoning basketball or football games, he must organize cheering and other clubs and attend their meetings, he must drive students to the games, he must take them to roller-skating rinks for parties, he has to attend all P.T.A. meetings, also all the meetings scheduled by the principal and superintendent. He must go to different committee meetings where his presence is expected. I do not intend to continue the list of all the outside activities in which a teacher is expected to participate because it would take too much space.

We all know that a teacher very often does not have time to correct papers and assignments, that he does not have time to read a little in his field and find out what is new—he does not have a chance to feel like a free human being. As long as we will not understand the simple fact that the teachers should teach, and that all other activities in many instances are detrimental to the "growth" of teachers and students, no change in curriculum will help much

help much.

The students will shy away from the courses which are more difficult not because they do not have capacities, but simply because the courses are presented in such a manner that they rather

discourage than encourage students. A teacher who does not have much enthusiasm himself cannot expect much enthusiasm from his students.

ARE WE READY FOR THE CHANGE?

We may expect that the stiffening of requirements will cause, in many instances, what is known as "passive resistance." The students will take the required courses, but how much will they learn? Can we expect many teachers to "flunk" 75 per cent of the class? Some at the University of Florida tried and got national publicity and a strong reaction from the students. If today a teacher in a high school would try to do the same—pretty soon he would be told that he does not know "how to teach." It will not be easy to convince the parents that a school is primarily a place of learning and, if their children do not have abilities to learn, they should leave school. How many parents would like to find out that their children are not "high school material?"

These and a few other problems must be solved concurrently with a change in curriculum, otherwise we will build an elaborate structure which rests on shaky foundations.

MERIT RATING AND THE SINGLE-SALARY SCHEDULE

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During the past year, numerous articles pertaining to teachers' single-salary schedules and merit rating procedures and proposals have appeared in the professional education journals and the lay press. While extreme positions have been amply represented by several writers, there is much evidence of increasing areas of agreement among those who are willing to concede that there are at least two sides to all arguments.

The single-salary schedule represents the culmination of several decades of effort on the part of teachers' organizations throughout the nation. Now that it has come of age, it is the subject of careful, if sometimes emotional, scrutiny. It is not surprising to find that this scrutiny has uncovered some apparent weaknesses

as well as strengths.

Perhaps the chief virtue of the single-salary schedule lies in the effect it has had toward discouraging certain practices which were not conducive to an educationally sound development of the public schools and the teaching profession. The bargaining system, which it has largely replaced, was characterized by the placing of local spinsters at a decided advantage over non-local, married, or male candidates for teaching positions. Secondary school teachers were usually paid more than were the elementary school teachers and, furthermore, the subject taught in the high school or the grade level in the elementary school would frequently be the basis for salary differentials. It is very unlikely that many teachers or school patrons will seriously advocate a retracing of steps in the

direction of those practices. The chief weakness of the single-salary schedule may well lie in its relative rigidity. Teachers are usually placed in categories for salary purposes solely on the bases of years of teaching experience and the number of credits earned in teacher preparatory institutions. There is ample evidence that professional as well as lay people seem to be increasingly aware of a need to apply other criteria to the salary schedules. The suggestion of better pay for better teaching has been steadily developing into the proportions of a demand.

Reports on analyses of various experiences in the area of teachers' salaries, as well as the portrayals of many viewpoints on the subject, have resulted in some rather clearly defined factors which may well be kept in mind as we work toward better salary situations in our public schools. This writer has attempted to summarize some of these factors in the form of eight realities, which, he believes, must be recognized and respected by all parties concerned

in the development of improved salary formulas.

First, the single-salary schedules commonly in use today have proven to be quite acceptable as reasonably sound basic formulas for teachers' salaries. In general, a teacher with four years of college preparation is better equipped to teach than is one with three or less years of such training. A teacher who has taught well enough to be rehired several times has probably evidenced sufficient ability to justify an increase in salary. This system has also encouraged the development of more highly trained teacher personnel, espe-

cially at the elementary school level.

Second, the teacher training institutions have been continuously striving toward the improvement of the quality of their teacher graduates. Any person who takes the time to read even a few professionally oriented publications cannot help but be impressed by the reports of expenditures of a great amount of time and energy in behalf of this is in behalf of this important phase of our educational system. It is difficult to consider the consideration of the difficult to consider for a moment that a teacher training institution exists in the United States today whose faculty is not actively engaged in tively engaged in some deliberate and organized effort aimed at improving the column deliberate and organized effort aimed at improving the educational process of its school. All in all, the profession need not be apologetic regarding the graduates entering its ranks today.

Third, teacher certification requirements have risen steadily during the past decade despite the great demands for more and more teachers each year. This, coupled with the evidence of improving teacher training proving teacher training programs, should justify a basic single-salary schedule which have been salary schedule which have be salary schedule which begins at a level sufficiently high to attract

able students who may be potentially superior teachers. Fourth, a merit rating system cannot be developed to the bene-of a school system. fit of a school system unless there is mutual confidence and respect on the parts of teachers. on the parts of teachers, administrators, and the lay public.

Charges and counter-charges may diminish if all parties concerned will use as their ultimate criterion the answer to the question, "Is this particular point conducive to a better learning situation for the students in our schools?" Reckless accusations broadcast in an irresponsible manner are a disservice to all of us. There is no justification for general indictments to the effect that the general public is chiefly concerned with "pinching pennies", or, that administrators are constantly seeking power weapons, or, that teachers are more concerned about their racket than the welfare of their pupils. Our professional ethics would seem to require us to go somewhat more than half way in this particular matter.

Fifth, there is little, if anything, to be gained by attempting to compare the merits or demerits of a teachers' salary system with the salary and wage practices of privately operated business firms or non-governmentally employed professional people. The lack of common, or comparable, factors makes these analogies rather

ludicrous.

Sixth, there should be no limit placed upon the number of teachers who may qualify for additions to their basic salary in accordance with a merit rating provision. Merit-based increases in salaries should be planned with the realization that most of the teachers of a given school system will eventually meet all of the criteria established for merit recognition.

Seventh, the evaluation of such an intricate matter as teaching ability and effectiveness poses a tremendous problem, or series of problems. Evaluators are forced to grapple with perhaps more variables than constants, more unknown quantities and qualities than known. We are, therefore, forewarned that there will be no easy solutions and the hard ones may hold only for a certain place for an indefinite period of time. We will likely have to be content with clues rather than answers. These clues, however, will probably be worth the efforts involved.

Eighth, teacher salary considerations, like other matters of public concern, are inextricably related to the underlying values concepts of our society. Public school salary systems tend to reflect our basic attitudes regarding such fundamental concepts as the relative importance of a public school system in our culture; the status of the teaching profession in our society; and our interpretations of the needs of our nation and the desires of our people.

THE TEAM APPROACH IN SUPERVISION

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A unique organization of the administrative-supervisory staff wherein all principals and supervisors spend some time in each building in the district, has been in effect in a Long Island school district for the past nine years.

Traditionally a building principal is responsible, along with whatever supervisors are on the staff, for the supervision of instruction in his particular building. His is the sole responsibility for evaluation of teachers, advice on curriculum revisions and, in some cases, the hiring or releasing of personnel.

In the school district mentioned, a team approach is used for all these functions and the administrators concerned are highly satisfied with the results.

For the benefit of other school districts, here is a full explanation of the program and its results and so administrators may judge for themselves whether or not desired goals are being achieved.

First, here is the background of the District. It is one of three ementary district. elementary districts in Valley Stream, Long Island, New York. There are three main schools in the district, and a three-room neighborhood school schools in the district, and a three-room neighborhood school, serving a total of 2700 pupils from kinder-garten to grade size TV garten to grade six. The total population of the district is 16,000. The teaching staff The teaching staff numbers 110; the administrative team includes a supervising principal of the district is 10,000 as supervising principal of the administrative team includes a supervising principal, three building principals, an assistant principal and an elementary cipal and an elementary consultant. The work of this administrative team is, of course, the primary topic of this article.

In this set-up, building principals are not only responsible for particular building being hard and particular building being her building being building buil a particular building but have district responsibilities besides. As part of the team, their own part of the team, they not only supervise instruction in their own buildings but also show that the buildings but also share supervision of instruction throughout the district. Previous to the district. Previous to this year, every teacher was seen by each of the team in a formal at the team in a formal observation, besides numerous informal observations. Thus cook besides numerous informal observations servations. Thus each teacher received five formal observations from five administrations from five administrators with five different backgrounds. This year, because of ever in the had year, because of ever increasing size the observation schedule had to be changed but the team approach was still used.

This year each principal will observe every teacher in his building at least once, preferably more. The elementary consultant and the assistant principal will observe each tenure teacher in the district at least once and each probationary teacher at least twice. Each principal, the assistant principal, and the elementary consultant will observe every probationary teacher in the district, as follows:

1) Each teacher in his first year, by December 1.

2) Each teacher in his third year, by January 1.

3) Each teacher in his second year, by February 1.

Plus the above, each principal will observe tenure teachers outside his own building upon the recommendation of any of the other observers.

It will be noted from the above schedule that each teacher will still receive five formal observations but the building principal's amount of observations has been lessened from previous years. The lag is being assumed by the elementary consultant and the

assistant building principal.

This system has proven to be extremely effective because resources can be pooled to help teachers better their instruction, the good ideas one teacher is using can be exchanged and these "good" things can be shared with other teachers in the district. It is also of great importance for the evaluation of teachers when tenure is under consideration. It leaves a principal with a fine feeling to know that it is not only his judgment which decides for or against a teacher when this issue arises. If the majority of the team feels one Way or another about such a matter, one can be quite sure that a fair and just decision will be reached. Thus are teachers provided with an "insurance policy" against unfair judgment.

The team approach actually begins with the engaging of teachers and is continuous throughout a teacher's time in the district. Administrators act as a team in interviewing candidates and again pool their judgment in the hiring of new personnel. At the time of hiring, teachers are informed concerning this approach so that they know what to expect of the administration and what can be expected of them. They also know that they are engaged for the district and not for any particular school. Each year, staffs are balanced so that no one school will be overburdened with too many new personnel and each has a fair number of experienced

teachers.

After new people are hired the team orients them to the district by a series of meetings designed especially for them. These meetings cover planning of lessons, classroom control, the keeping of

the attendance registers, and marking and reporting.

Once they are in their own classrooms, frequent and early observations are made of them (as you will note from the schedule previously mentioned) and help is given them when, and if, they need it. They are urged to ask for help and not to feel that such requests will be marked against them. They also have a helping teacher to whom they can turn for the answers to routine questions. A helping teacher is a teaching member of the staff usually on the same grade level as the person he is assigned to help.

The same approach is used in handling curriculum committees. Each committee is assigned an administrator, whose background incorporates that field, as a consultant. He answers any questions the committee may ask, provided he knows the answer, and acts as the liaison between the particular committee and the other members of the administrative team. He reports to the team what the committee is doing and helps them to put their work in written form for the committee.

form for the rest of the faculty. Out of this committee activity have come new concept courses in Science, Social Studies, Health and Handwriting, to name a few of the more recent achievements.

Approximately six times a year, there are meetings by grades for all teachers in the district. These provide teachers with an excellent means for sharing ideas and the pooling of thinking in regard to problems of a particular grade level. There is a member of the administrative team assigned to each of these grades to act in the same manner as he does with the curriculum committees and also as the light

All members of the administrative team, plus the audio-visual coördinator, work an eleven-month year: as another example of teamwork, it is pointed out that summers are planned so that vacations are staggered, thus allowing the offices to be covered by at least one and possibly two administrators at all times during the summer months. Vacations are also planned so that all are on hand for the first two weeks immediately following the closing of school and it is at this time that plans are made for the summer's work. Again all are on hand for the last week immediately preceding the opening of school in the fall and at this time it can be ascertained what has been accomplished and final goals can be set. A survey

of the work accomplished in the summer of 1957 showed that some 40 different handbooks, booklets or instruction sheets had been typed, duplicated and collated. The team approach in regard to summer work was fully covered in an article by this author entitled, "Eleven Months For School Administrators," in the June, 1958, issue of *The American School Board Journal*.

Will this team approach work in other districts? We are sure that it will, but there are a number of cautions for a district which has never had it. The reasons why it seems to have worked for this district might be as good a way as any to point out such hazards.

First of all, there has always been the example of the friendly, open manner of the supervising principal, who was the only principal in the district before the influx of new residents from the city. He set the tenor for his time and as new schools were opened and new administrators needed he made sure that such cooperation could be expected of the new personnel and that they understood what his plans for the future entailed. Each administrator, before being engaged, was thoroughly briefed and checked on his spirit of coöperation. Thus, the team is a coöperative group of men who are not overly sensitive and who do not take a constructive criticism as a personal affront to themselves but as an endeavor on the part of the team to improve the program. There are open discussions of any proposed ideas and frequently there are arguments, but no one leaves the meeting with any animosity towards another other member. Ideas may originate with any member of the team, or from any member of the staff. Such ideas are then brought forth at meetings, which take place once a week, examined from all angles and then, either thrown out, or adopted as district policy. Actually, no one person can take credit for any progress made, because the basic idea may be completely changed from its original form by the time the team has decided to adopt it as policy.

The weekly meetings mentioned above serve to keep all informed and are a perfect clearing house for any problems as they arise and, in many cases, meet the problems before they arise. They also serve to keep all administrators completely informed concerning every aspect of the school program.

All also attend the monthly Board of Education meetings which serve to give information concerning how the board members feel about the various issues and acquaint each administrator with

the board members. Knowing them as individuals and vice versa

makes it that much more a coöperative association.

It is felt that the team approach has paid huge dividends to the individual members of the team and to all members of the staff but most important to the boys and girls who attend the schools. This program will continue, with any modifications which changing times make necessary.

LOUISIANA SUPERVISORS EXAMINE THEIR PRACTICES¹

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What do Louisiana supervisors do? What practices do they employ to improve instruction? Are the things they do to improve instruction considered good practices?

These were the questions that school supervisors in Louisiana

sought to answer as they began a study early in 1955.

How the Study Began. For several years prior to 1955, the Louisiana School Supervisors moved toward an examination of their practices. In the meetings of their official organization, the Louisiana School Supervisors Association, they began to raise more and more questions about their own efforts to improve instruction. Of major concern to them were two discoveries, namely, (1) that an alarming number of lay and professional people were uninformed or misinformed concerning the activities of supervisors, and (2) that even among some professional people there was a tendency to accord little importance to supervision generally. Their deep concern accounted for the decision at the Supervisors' Mid-Winter Conference to do research on the three questions stated above

How the Study Was Conducted. In seeking answers to these questions, the supervisors planned to do four things, namely, (1) to keep time logs of their activities on selected half-days throughout the 1955-56 school session, (2) to select one supervisory activity in which they were engaged on each of these half-days and describe it objectively in writing, (3) to analyze the time logs and anecdotal descriptions for the purpose of arriving at a picture of how Louisiana supervisors engaged in the study spend their time and for the purpose of identifying the techniques used over and

A study made by the Louisiana School Supervisors Association in coöperation with the State Department of Education and the College of Education, Louisiana State University. Dr. Jane Franseth of the U. S. Office of Education served as consultant for the study.

over to improve instruction, and (4) to examine the professional literature and the research in order to find out if those things the supervisors in this study were doing to improve instruction were considered good supervisory practices. At the conclusion of the study, the supervisors submitted written statements concerning the worth of the study and the questions that remain unanswered until further research is conducted.

The guesses about their activities. During the early part of the study the supervisors in attendance at a special work conference listed different activities which they thought were typical of supervisors in the state. Later, as they became engaged in the analysis of the available data, they thought of many other activities and added them to the original list making a total of ninetynine.

The following statements illustrate the types of guesses made:

(1) The supervisor decides on the problems for study in his parish.

(2) The supervisor does clerical work.

(3) The supervisor is in charge of the selection and distribution of textbooks and supplies.

(4) The supervisor works with lay groups.

(5) The supervisor is a resource person.

(6) The supervisor initiates supervisory services.

(7) The supervisor uses the scientific approach in supervision.
(8) The supervisor uses the scientific approach in supervision. (8) The supervisor provides help on the basis of needs con-

sidered important by the teachers.

(9) The supervisor rates his teachers.

(10) The supervisor coördinates the instructional program in

the parish.

Getting the data needed to identify recurring supervisory practices. The supervisory practical t tices. The supervisors kept time logs on certain days throughout the year. In addition, they wrote detailed descriptions of many things they did to improve instruction on the days they kept time logs. More than a hundred persons participated in this part of the study at one time or another.

An example of a time log submitted by one of the supervisors

for a half-day of work follows:

8:00 Arrived at office; collected materials to be delivered to school.

8:45 Arrived at school; checked in with principal. (Principal busy helping lunchroom worker with October report.)

8:55 Visited first and second grades' classroom and observed lessons. First graders engaged in reading situation. Second

graders busy on several types of work.

9:15 Principal arrived in classroom. Principal and supervisor noticed that one group of children worked independently while teacher was working with other group. A variety of work was planned for the children.

9:40 Talked with teacher and principal.

9:45 Visited third and fourth grades' classroom and observed an arithmetic lesson. Assisted the teacher in teaching a spelling lesson.

10:20 Recess—informal visiting.

10:30 Visited fifth and sixth grades' classroom and observed a geography lesson.

11:20 Talked with fifth and sixth grades concerning the teaching

11:30 Visited seventh and eighth grades' classroom and observed part of an arithmetic lesson.

11:45 Visited the gymnasium and observed a physical education class.

12:15 Lunch

Likewise, the following quotations will illustrate the detailed descriptions (anecdotal recordings) of supervisory incidents which the supervisors wrote on each day they kept time logs:

(1) "The principal, serving as chairman of the over-all committee charged with planning the August workshop, requested the help of the supervisor on

a job to be done. An appointment was made by telephone.

The job was to name committees, state their functions, and to list personnel for each. All of these had been discussed in the large planning committee mittee with the sonnel for each. mittee meeting and the problem now was mainly one of preparing a written

The function of each committee was discussed fully and a brief statement litter for sheet to send to all members. Written for each; likewise the personnel of each committee including the chairman was listed. The sheet was then left with the supervisor for mimeo-

graphing and sending to committee members."

(2) "The principal showed the supervisor a testing program that he and his faculty had developed. Supervisor gave him suggested test programs recommended to the supervisor gave him suggested test programs. recommended by SRA, California Test Bureau, and World Book Company. The number of tests listed on their program had already been ordered. The principal added, 'We will adopt a planned program in line with recom-

mendations next year."

(3) "Visited a health class in one section of the third grade. After the class the teacher explained her program showing how much time she had scheduled for health teaching. We discussed the work being done in the health classes even to the point of how it affects the attendance. This was a timely discussion for this was a timely discussion for this was a timely discussion for the point of how it affects the attendance. sion for this particular teacher as this school was working hard to keep its attendance up."

Identifying the recurring practices of Louisiana supervisors. In small groups, the supervisors read the time logs and descriptions of supervisory activities. When they came to a statement which supported any one of the guesses they had listed, they copied this statement and placed it under this particular guess as evidence that it was a practice of Louisiana supervisors.

For example, the following statements which support the guess, "Supervisors are resource persons," were copied from the time logs

and descriptive accounts:

"Supervisor gave him suggested test programs recommended by SRA, California Test Bureau and World Book Company."

"Assembled map catalogues."

"Administered California Short Form Test of Mental Maturity."

"Gave specific information to lunch room managers on lunch programs."
"Conference with teachers are graded as a specific information to lunch room managers on lunch programs." "Conference with teacher who was leader of the group of fourth grade teachers the day before the in-service study."

"Invited to a fourth grade room to work with a few special reading cases and to give some half.

and to give some help with them on phonics."

"Discussed with teacher a reading problem and how we could get these children to the Service and problem and how we could get these children to the Special Education Clinic."

"Conferred with speech clinician in regard to speech problem in my parish schools."

"Selected professional library books for teachers taking extension courses." "Supervisor distributes filmstrips to grades one through five."

"Supervisor showed the principal samples of the different types of stand-ardized tests and arrived tests are already tests and arrived tests and arrived tests and arrived tests are arrived tests and arrived tests and arrived tests and arrived tests are arrived tests and arrived tests and arrived tests are arrived tests and arrived tests and arrived tests are arrived tests are arrived tests are arrived tests and arrived tests are arrived test are arrived tests are arrived test arrived test are arrived tests are ardized tests and explained what they attempted to measure."

"Brought test booklets—made other preparations for the testing program."
"Visited with the principal "Visited with the principals who were discussing and completing a map order."

"Reviewed and revised an order for materials and equipment for General Science, Biology and Ch Science, Biology, and Chemistry for a new department."

"Went to Health Unit and secured an additional audiometer." "Worked with secretary in preparing a sample booklet to give parents of first graders."

"Worked on a paper which I had been asked to prepare for a member of the State Department" the State Department."

When the analysis of the data was completed, the supervisors found that eleven of their guesses had enough supporting statements from the time logs and anecdotal recordings to warrant being labeled "recurring practices of Louisiana supervisors."

Are these practices good? When these recurring practices were identified, the supervisors began an examination of the research and the professional literature. With the help of a supervision class at Louisiana State University, they found statements in the literature and the research pertaining to each of these practices. They listed each statement with proper identification under the practice which it supported. For example, the following statements which suport the recurring practice, "Supervisors are resource persons," were located:

(1) From the literature

"Teaching is enriched by the introduction and use of supplementary materials, and, while these sources of aid can take many forms, the supervisor had a definite responsibility for introducing the teacher to them."

Supervisors have responsibility for "preparing instructional materials. Prepare courses of study; prepare, list, and discuss instructional materials of many types; prepare oral or written materials on specialized problems of instruction, of testing, of improving specified aspects of instruction."

"Procedures and techniques for the improvement of teachers and teaching must be furnished by the supervisor to the teachers. He should keep himself familiar with resources which teachers can use and should keep teachers familiar with them."

"The supervisor will continuously evaluate his own work. He can be guided in this appraisal by such questions as these: ... Do I give help in

locating resource materials."5

The author includes the following in the duties of the supervisor: "Acting as a resource person or speaker in workshops, at school staff meetings, at state and national education conferences, at PTA meetings."

"Some supervisors have found their most helpful contribution consists of

William H. Burton and Leo J. Brueckner, Supervision, A Social Process,

New York: Appleton-Century-Crofts, Inc., 1955, pp. 17-8. Robert C. Hammock and Ralph S. Owings, Supervising Instruction in

Secondary Schools, New York: McGraw-Hill, 1955, p. 60.

² Harold P. Adams and Frank G. Dickey, Basic Principles of Supervision, New York: American Book Company, 1953, p. 27.

⁵ Ibid., pp. 224-5. Ethel Thompson, "So Begins—So Ends the Supervisor's Day." Educational Leadership, 10: 83-4, November, 1952.

making professional material that contains suggestions and ideas easily accessible to teachers."

Wiles lists the following as a way the official leader, or supervisor, can assist in improving the teaching-learning situation: "keeping all teachers supplied with up-to-date material."

(2) From the research

Replogle sent questionnaires to over 300 teachers in schools in the Middle West to determine the help wanted by teachers. "Locating and making available expert areas able expert resource personnel as special problems arise" was one of the areas in which these teachers wanted help most."

What They Found Out. The data gathered by the supervisors proved significant. They arrived at a picture of what supervisors do. They identified some of their recurring supervisory practices. They found support for these recurring practices in the literature and the research. They identified areas of needed research.

What supervisors do. The data from the time logs indicated siting classrooms. visiting classrooms, doing clerical work, conferring with principals and teachers and teachers, working with lay groups, traveling, and participating in group conferences were the activities on which they spent most time. Further analyses of the data revealed that approximately half of the activities half of the activities of the data revealed that approximately as related to nitely as related to improving instruction. Additional details about these activities these activities were found to be needed for a definite classification as related or unrelated.

What are the recurring supervisory practices? The data from the logs and the data from the incidents time logs and the descriptive accounts of supervisory incidents indicated that Louisiana supervisors who were engaged in study used the fall. study used the following supervisors who were engaged and over:

(1) Working with principals to improve instruction.

(2) Engaging in classroom visitation.

(3) Initiating ideas, making suggestions, and accepting responsibility for getting a job done.

(4) Serving as resource persons.

(5) Providing help on the basis of needs considered important teachers. by teachers.

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⁷ Kimball Wiles, Supervision for Better Schools, New York: Prentice-Hall, c., 1955, p. 262. Inc., 1955, p. 262.

^a Ibid., p. 343. Vernon L. Replogle, "What Help Do Teachers Want?" Education addership, 7: pp. 445-9. April 1960 Leadership, 7: pp. 445-9, April, 1950.

(6) Working with lay groups.

(7) Fostering an atmosphere of support and understanding to facilitate learning.

(8) Providing consultative service.

(9) Engaging in activities for their own professional growth.

(10) Making plans for their own activities.

(11) Providing opportunities for people to share in planning and making decisions about matters that affect them.

The examination of the professional literature and the available studies on supervision by the supervisors and the university class revealed data that amply supported each of the eleven recurring

practices as a good supervisory procedure.

By-Product of the Study. A by-product of the study was a firm conviction on the part of the participants that much additional research is needed in the area of school supervision. In their opinion, studies should be undertaken immediately for the following purposes:

(1) To find out the supervisory services which Louisiana teachers think are most helpful.

(2) To determine how much success is being achieved with

certain specific supervisory techniques.

- (3) To find out the extent of a supervisor's influence in changes that are affected.
- (4) To ascertain the correlation between a supervisor's philosophy and his practices.

(5) To determine the extent of conflicts in supervisory services.

- (6) To determine attitudes of school personnel and others toward supervision.
 - (7) To identify the obstacles to good supervision in this state.
- (8) To identify additional recurring practices of Louisiana supervisors.
- (9) To find out whether there are any especially promising supervisory practices that are not being utilized by Louisiana supervisors.
- (10) To classify all activities of supervisors more definitely as related or unrelated to supervision.

Already, a district supervisory group has underway a study that should throw some light on one of these areas of needed research.

BOOK REVIEWS

VIRGINIA L. SENDERS. Measurement and Statistics. New York: Oxford Press, 1958, pp. xvi + 594.

In seventeen chapters numbered 0-16, the author has made special effort to make statistics clear to the student. Chapter 0 is written for the students who are not quite ready to study statistics, "to help you to diagnose your difficulties and to review forgotten material." In the other chapters we find an organization of material which distinguishes "the four principal kinds of measurement scale"; urement scale," i.e., the nominal, ordinal, interval and ratio, and the five questions we "commonly ask of the data," (which more in detail become in detail become nine questions. Pp. 70-71). Also for special aid to the student by to the student, he will find the author's plan to summarize "All of descriptive statistics and the summarize in the statistics of the student of the student in the statistics and the statistics are summarized in the statistics and the statistics are summarized in the statistics and the statistics are summarized in the statistics and the statistics are successful to the student of the statistics and the statistics are successful to the statistics are successful to the statistics and the statistics are successful to the statistics are successful to the statistics and the statistics are successful to the statistics are successful to the statistics and the statistics are successful to the statistics and the statistics are successful to the statistics of descriptive statistics" in Table 2.1 and a further summary in Table 2.2 "Chapter 2.1" Table 2.2. "Chapter 9 will summarize the results and present the filled-in table." (Table 2.1) filled-in table." (Table 9.1, pp. 329-334.)

Chapters 1-16 take up the why and what of statistics; numbers, ings and measure up the why and what of statistics; numbers, things and measurement; the nominal scale; the ordinal scale; interval and retired; the nominal scale; the ordinal scale; interval and ratio scales (4 chapters); "Looking Backward," a summary chapters and ratio scales (4 chapters); "Looking Backward," a summary chapter; probability; testing hypotheses and establishing margins of error; information in the stable of errors in the margins of error; inferences from data (3 chapters); analysis of variance; and "A" There variance; and "An over-all view of inferential statistics." There are 20 Tables (A. T.) are 20 Tables (A-T) in the Appendix (pp. 531-580) and a generally well made Index.

erally well made Index (pp. 581-594). Helps for the student include questions and problems with any wers to the problems. swers to the problems at the ends of chapters. Many graphs and tables are used. A form tables are used. A few generally well-selected references appear at the ends of chapters. Many graphs at the ends of chapters Many graphs at the ends of chapters. the ends of chapters. Many suggestions are given for the correct use of statistics and for the correct index does use of statistics and for the avoidance of errors. The index does not always page the deciral avoidance of errors. not always page the desired definition. Some statements could be improved and more symbol.

improved and more symbols be included in the Index. The volume with a wealth of statistical information is of special terest to students with in the statistical information is of special those who interest to students with inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and to those who are desirous of checking the inadequate preparation and the inadequate preparation and the problems are desirous of checking the inadequate preparation and the problems are desirous the inadequate preparation and the problems are desirous the problems are desirous the problems are desirous the problems. are desirous of checking their own efforts by the use of problems and answers. The style is and answers. The style is pleasant and material is presented in an interesting way. In one an interesting way. In organization and in clearness of presentation, the author seems to have had a very considerable measure of success.

A. S. EDWARDS

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Walter B. Kolesnik. Mental Discipline in Modern Education. University of Wisconsin Press, 1958, pp. xi + 231.

Throughout the field of education the pragmatic test will be used to determine whether the educational process is successful. One of the older doctrines, "formal discipline," was firmly believed to operate satisfactorily in school practice. Briefly, it held that by undergoing a rigorous experience, doing hard work, studying very difficult subjects, one would derive experience applicable elsewhere in life, with no other effects. The adherents of this doctrine used it in support of favorite subjects when they came under attack for their relative lack of appeal to children, youth, and adults. Beginning, however, with A. B. Hinsdale who found effect overflowing into "congruent channels," and continuing with the famous experiments and resultant interpretations of Thorndike and Woodworth, studies and theoretical interpretations appeared which even yet are not well understood by those who champion the older claim of universal transfer of training or formal discipline. Because of the importance of the issue, we must have recurring examinations of the problems it involves, and the resulting information must be made available to everyone in the field of education.

Orata did this for the profession some twenty years age and now we have this new and very useful volume by Walter B. Kolesnik.

Chapter I explains the different meanings of mental discipline and some of its synonyms. Chapter II reviews its status in the last century; and we again meet some of our old friends—the Yale Committee, E. L. Youmans, DeGarmo, Pestalozzi, Joseph Payne, the Committee of Ten's report, the Herbartian movement, William James' historical experiment in memorizing. And, no doubt for the first time, Hinsdale is discovered.

The author points out that, well into this century, the older concept had its defenders and strong advocates. The reviewer claims that this group still exists, probably with minds somewhat closed

and unwilling to recognize the existence of possibilities other than just positive transfer of training. In Chapter III the author reviews the great mass of experimental evidence derived from studies by Thorndike and Woodworth, Norsworthy, Wang, Coover and Angel, Kline, Hewins, Peterson, Winch, Sleight, Fracker, Broyler, Briggs, Lewis, H. O. Rugg, Ruediger, Judd, Sorenson, Simpson, Bagley, and many others. He also reports the views of such proponents of the older concept as Paul Shorey and Nicholas M. Butler and ends the chapter by calling attention to the appearance of the

critics of the experimental data.

Chapter IV, which he names "Reactions," is largely an examination of the various interpretations that followed upon the identification of the older doctrine and the theories of the doctrine coming upon the heels of the experimentation. Thorndike and Woodworth's identical element theory is reviewed. It is pointed out that Moore and Heck found the "traditional theory quite inadequate"; and that others tended to claim there was no truth in the older belief, while Colvin cautioned that it would be a misfortune to convey such a belief. Orata's critical examination of the idea of identical elements is restated. Judd's theory of transfer of generalizations is again brought to view. Various theories of the mind, such as faculty psychology, connectionism, et al., become involved in these interpretations. The recent view of Bestor is reported. We also find in this chapter the beginnings of the examination of the relations between such matters as motivation of learner, good teaching, and other factors such as intelligence status of learner and the possibility of positive transfer. More proponents of the older doctrine are reported—among others, Lodge of Teachers College and the Classical Investigation report.

Chapter V is devoted to some of the history and explanation of faculty psychology. Those who hold this to be a single, clear-cut idea should read this chapter carefully, for the writer shows that it is not. His history will be helpful to many professionals but probably not to laymen. Chapter VI, on "Liberal Education," enters into the aged stronghold of the older doctrine, the colleges of Liberal Arts. With their objective of general culture of mind training, or of ethical values, one must either come to grips with the older doctrine or rethink and readjust in terms of what is today's view of that idea. That many have made no attempt to revise their views, he makes clear. Yet, Liberal Education would probably be

much more effective if they would, and, after doing so, would then

increase their efforts to do better teaching!

Kolesnik devotes Chapter VII to a brief discussion of "Mental Training and Democracy" wherein he explains some of the very important issues involved in this situation. In the last chapter, he suggests some approaches to this great problem that will be of help, to those who will read and study what he has written.

The review of the existing literature in our country is quite complete, but a few articles have been omitted, including the reviewer's old study of *Transfer of Spelling Vocabulary*; that fact, however,

does not invalidate the value of the report.

The reviewer urges the proponents of general education, the advocates of the older doctrine of formal discipline, and others who deal with the vital need of the end result of education to give serious and careful consideration to what is known about this problem. It will pay them and this compilation and interpretation will serve them well if they will but read and, as they read, lay aside their ancient preconceived opinions. The reviewer had to do this as long ago as 1910, and has profited greatly thereby. This volume should help correct the remnants of that partial view of some that "there is no such thing as transfer of training"; it could also be the means of awakening many college teachers to the need for raising their teaching level to include, along with subject-matter, other entities that are terribly important to us all in this jittery world of today.

The format is good, the few errors are unimportant. The reviewer commends the University of Wisconsin and the University Press, as well as the author on the production of this volume from his

doctoral dissertation.

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PUBLICATIONS RECEIVED

George W. Albee. Mental Health Manpower Trends. New York:

Basic Books, Inc., 1959, pp. 361.

MARVIN D. ALCORN AND JAMES M. LINLEY, Editors. Issues in Curriculum Development: A Book of Readings. Yonkers-on-Hudson, New York: World Book Company, 1959, pp. 420.

WILLIAM M. ALEXANDER AND J. GALEN SAYLOR. Modern Secondary Education. New York: Rinehart & Company, Inc., 1959, pp.

ROBERT R. BUSH AND WILLIAM K. ESTES, Editors. Studies in Mathematical Learning Theory. Stanford, California: Stanford University Press, 1959, pp. 432.

LEONARD H. CLARK AND IRVING S. STARR. Secondary School Teaching Methods. New York: The Macmillan Company, 1959,

рр. 340.

LUELLA COLE IN ASSOCIATION WITH IRMA NELSON HALL. Psychology of Adolescence. Fifth Edition. New York: Rinehart & Company, Inc., 1959, pp. 731.

LESTER D. CROW AND ALICE CROW. Sex Education for the Growing Family. Boston: The Christopher Publishing House,

1959, pp. 189.

ROBERT S. DANIEL. Contemporary Readings in General Psychology. Boston: Houghton Mifflin Company, 1959, pp. 385 (paper).

N. M. DOWNIE AND R. W. HEATH. Basic Statistical Methods. New

York: Harper & Brothers, 1959, pp. 289.

WILBUR H. DUTTON AND JOHN A. HOCKETT. The Modern Elementary School. New York: Rinehart & Company, Inc., 1959, pp. 530.

JEFFERSON N. EASTMOND. The Teacher and School Administration.

Boston: Houghton Mifflin Company, 1959, pp. 522.

ALLEN L. EDWARDS. Edwards Personal Preference Schedule. Revised. New York: The Psychological Corporation, 1959, pp. 27 (paper).

CARLTON W. H. ERICKSON. Administering Audio-Visual Services.

New York: The Macmillan Co., 1959, pp. 479.

FRANK J. ESTVAN AND ELIZABETH W. ESTVAN. The Child's World: His Social Perception. New York: G. P. Putnam's Sons, 1959, pp. 302 pp. 302.

JOSEPH L. FRENCH, Editor. Educating the Gifted: A Book of Readings. New York: Henry Holt and Company, 1959, pp. 555.

KARL C. GARRISON AND DEWEY G. FORCE, JR. The Psychology of Exceptional Children. Third Edition. New York: The Ronald

Press Company, 1959, pp. 586.

LYMAN A. GLENNY. Autonomy of Public Colleges: The Challenge of Coördination. New York: McGraw-Hill Book Company, 1959, pp. 325.

CARTER V. GOOD, Editor. Dictionary of Education. Second Edition. New York: McGraw-Hill Book Company, Inc., 1959,

pp. 676.

Daniel E. Griffiths. Administrative Theory. New York: Appleton-Century-Crofts, Inc., 1959, pp. 123 (paper).

NORMAN E. GRONLUND. Sociometry in the Classroom. New York:

Harper & Brothers, 1959, pp. 340.

HILDE T. HIMMELWEIT, A. N. OPPENHEIM, AND PAMELA VINCE. Television and the Child. New York: Oxford University Press, 1958, pp. 522.

DARRELL A. HINDMAN. Coöperative Programs of Training and Research in Mental Retardation. Yellow Springs, Ohio: The

Antioch Press, 1959, pp. 160 (paper).

ELIZABETH B. HURLOCK. Developmental Psychology. Second Edition. New York: McGraw-Hill Book Company, Inc., 1959,

BEN KARPMAN, Editor. Child and Juvenile Delinquency. Washington, D. C.: Psychodynamics Monograph Series, 1959, pp.

Sigmund Koch, Editor. Psychology: A Study of a Science. Study I. Conceptual and Systematic. New York: McGraw-Hill

Book Company, Inc., 1959, pp. 710.

WILLIAM C. KVARACEUS AND WILLIAM E. ULRICH. Delinquent Behavior: Principles and Practices. Washington, D. C.: National Education Association of the United States, 1959, pp. 350 (paper).

HERTA LOEWY. More about the Backward Child. New York:

Philosophical Library, 1959, pp. 138.

IRVING LORGE. The Lorge Formula for Estimating Difficulty of Reading Materials. New York: Teachers College, Columbia University, 1959, pp. 20 (paper).

JIM C. NUNNALLY, JR. Tests and Measurements: Assessment and Prediction. New York: McGraw-Hill Book Company, 1959,

pp. 446.

G. W. PARKYN. Success and Failure at the University. Volume I. Academic Performance and the Entrance Standard. Wellington: New Zealand Council for Educational Research, 1959, pp. 254.

RALPH L. POUNDS AND JAMES R. BRYNER. The School in American Society. New York: The Macmillan Company, 1959, pp. 518.

SIDNEY L. PRESSEY, FRANCIS P. ROBINSON, AND JOHN E. HORROCKS. Psychology in Education. New York: Harper & Brothers, 1959, pp. 658.

FRITZ REDL AND WILLIAM W. WATTENBERG. Mental Hygiene in Teaching. Second Edition. New York: Harcourt, Brace and

Company, 1959, pp. 562.

JOSEPH S. ROUCER. The Challenge of Science Education. New

York: Philosophical Library, 1959, pp. 491.

RAYMOND E. SCHULTZ. Student Teaching in the Secondary Schools: A Guide to Effective Practice. New York: Harcourt, Brace and Company, 1959, pp. 402.

ABRAHAM SHUMSKY. The Action Research Way of Learning. New Yorks T. York: Teachers College, Columbia University, 1958, pp. 210.

DOROTHY F. STONE. Modern High School Biology: A Recommended Course of Study. New York: Teachers College, Columbia University, 1959, pp. 96 (paper).

Davis R. Turner and Alison Peters. How to Pass High on College Entrance Tests. 1959 Edition. New York: ARCO Publishing Co.

lishing Company, Inc., 1959, pp. 256 (paper).

PAUL WASSERMAN. Measurement and Evaluation of Organizational Performance. Ithaca, New York: Graduate School of Business and Dr. Ithaca, New York: Graduate School of School of Business and Dr. Ithaca, New York: Graduate School of Business and Dr. Ithaca, New York: Graduate School of Business and Dr. Ithaca, New York: Graduate School of Business and Dr. Ithaca, New York: Graduate School of Business and Dr. Ithaca, New York: Graduate School of Business and Busi Business and Public Administration, Cornell University, 1959, pp. 110 (paper).

The Late William A. Yeager. Administration of the Noninstructional Personnel and Services. New York: Harper & Brothers, 1959, pp. 498

1959, pp. 426.

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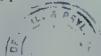
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HOW WELL CAN TEACHERS ESTIMATE STUDENT GOALS?

FRANCIS J. CROWLEY

Fordham University, School of Education

How well do teachers know and understand their students? Are teachers aware of the hopes and worries of their students or are the teachers so concerned with their own problems and subject matter that they do not know or care very much about those of the students? An opportunity to measure the isolation of the teachers' "Ivory Tower" came about as a continuation of a study of adolescent goals (Crowley, 1957). The initial study sought to answer the question: "What are the goals, obstacles to the goals, and means to the goals of male high school seniors and college freshmen?" The present study sought to answer the question: "How well can high school teachers estimate the goals, obstacles and means to the goals of male high school seniors?"

There are many factors which could possibly influence the teachers' ability to estimate student goals. Among these, the following were considered for use in the present study: sex of the teacher, subject taught and years of experience. Although personality, emotional stability and job satisfaction are also important factors, it was not feasible to employ such variables in the present study. The additional problem of differences among the seniors, i.e., vocational-academic, college bound-service bound, bright-average-slow, socioeconomic status, all had to be considered in

evaluating the teachers' estimates.

THE PROBLEM

The present study sought to answer the following questions:

(1) How closely do teachers, as a group, estimate the goals, obstacles, and means to the goals of their male senior students?

¹ This research was supported by the Office of Naval Research, Personnel and Training Branch, Contract No. Nonr 880(02). This paper is a summary of Technical Report No. 2.

(2) Is there a difference in the estimates made by male and. female teachers?

(3) Are there differences in the estimates made by teachers in

different subject matter areas?

(4) Are the estimates made by teachers in vocational schools more accurate or less accurate than those made by teachers in academic schools?

(5) Are there changes in the estimates of the teachers which are

apparently related to length of experience in teaching?

(6) Were the teachers' estimates more representative of the responses of a particular category of students classified by socioeconomic level, or mental ability?

PROCEDURE

The plan-of-life checklist developed in the initial study on adolescent goals was employed in the present study to obtain the teachers' estimates of students' responses. The checklist was composed of 193 items divided into three item types, viz., goals, obstacles and helps. The items were also divided into five time-of-life groupings: one year from now, five years from now, ten years from now, twenty years from now, and lifetime. All the items pertaining to one year from now were on the first page of the checklist. The second page contained all the five-year goals, obstacles and helps. The five pages, one for each time-of-life grouping, were preceded by a page of instructions. In brief, the instructions directed the testee to choose and rank the three most important goals, the three most important obstacles, and the three most important helps on

The majority of the checklist items were obtained from responses on a preliminary form administered to eighty-five senior boys from one public academic and one public vocational high school of the City of New York. The remainder of the items were composed by the present writer, research assistant and consultants. Four hundred seventy items were included on a trial form, administered to 191 ministered to 121 senior boys in two public academic and one public vocational high school of the City of New York. The 193 items on the final checklist were chosen on the basis of the results of the

During the spring term of 1957, the checklist was administered anonymously to 485 senior boys from seven public academic and two public vocational high schools of the City of New York. The responses of the subjects were tallied on each of the following variables: school type (academic or vocational), six IQ levels, and socioeconomic status as determined from stated occupation of father. A proportion of choice over the composite (Guilford, 1954) was computed for each item in each of the classes of the variables.

During the fall term of 1957 the same checklist was completed anonymously by 205 public high school teachers from seven academic and two vocational high schools of the City of New York. The nine schools were drawn from the eleven schools which participated in the initial study of adolescent goals. The instructions directed the teachers to complete the checklist in the same manner that they would expect an eighth-term boy to complete it. The teachers were cautioned with respect to the homogeneous and select characteristics of an eighth-term group, and were asked to respond in terms of the type of student with whom they were familiar. In addition to the checklist responses, descriptive data on the teachers were also obtained, namely, sex, subject taught and years of experience. The responses were then tallied on each of these variables and on the type of school.

There were 133 male and 72 female teachers. There were 165 academic and 40 vocational high school teachers. The teachers were distributed according to subject taught and years of experience, as shown in Table I.

A proportion of choice over the composite was computed for each item in each of the classes of the variables. The three highest rank items in each of the fifteen checklist sections were then selected for direct comparison of the following groups:

TABLE I.—DISTRIBUTION OF SUBJECTS ACCORDING TO YEARS OF EXPERIENCE AND SUBJECT TAUGHT

Years	No. Subject		No.
30 or more	47	English Social Studies	45 41
25-29 $15-24$	38 51	Science-Math.	51
5–14	34	Non-Academic (Phys. Ed., Shop Bus., Commer.)	43
0-4	35	Misc. (Lang., Music,	25

(a) Total teacher group vs. total senior boys group

- (b) Academic High School teachers vs. Academic High School seniors
- (c) Vocational High School teachers vs. Vocational High School seniors

The comparisons were made by computing the probability of agreement between the two groups on the items and their ranks, assuming that the teachers' choices were no different than random choices. The probability was cumulative, that is, the exact probability of the teachers ranking the items as they did, was added to the exact probabilities of all the better rankings which could have been made. "Better rankings" here means any choice or ranking of the top three items which was in closer agreement to that of the senior boys.

The proportions-of-choice-over-the-composite were compared directly in order to ascertain the presence of differences among the groups in each of the following cases:

(a) Male—female

(b) Five subject matter groups

(c) Five years-of-experience groups

The sixth question stated in the problem required that the proportions-of-choice-over-the-composite of the total teacher group be compared with the students' proportions on the items which differentiated the socioeconomic levels and mental ability levels of the senior boys.

RESULTS

Total teacher estimates. The probabilities for high rank choices are presented in Table II. Only three of the probabilities are greater than .05. On the five year goals, the senior boys ranked "Graduate from college or technical school", "Get married" and "Help to support my parents", first, second and third, respectively. The teachers' highest ranked items were: "Graduate from college or

TABLE II.—PROBABILITY OF AGREEMENT BETWEEN TEACHERS AND SENIOR BOYS' CHOICES

		2018	CHOICES		
Goals	1 yr.	5 yr.	10 yr.	20 yr.	Life
Obstacles Helps	.010 .291 .021	.211 .018 .003	.004 .021 .079	.003 .001 .045	.033 .018 .021

technical school", "Make a lot of money" and "Get a car." On the one year obstacles, the senior boys ranked "I don't work as hard as I should", "My education might not be good enough" and "Not enough time for all I want to do", first, second and third, respectively. The teachers' highest ranked items were: "I don't work as hard as I should", "The entrance exam might be difficult" and "I don't have enough money."

In all the other areas of the checklist, the teachers coincided with the senior boys in at least two of the three high rank items. There were differences in the rank order, but the probability of random agreement in these instances, except on the ten-year helps, was less than .05.

Certain items on the checklist were rated quite differently by teachers and students. There were twenty-six items which were either rated much higher or much lower by the teachers when compared to the responses of the senior boys. These twenty-six items, which showed the least agreement in the rating of the two groups, included four which were in the forty-five-high rank items of senior boys and three which were in the forty-five-high rank items of the teachers. On these items then, there was a difference of opinion which was more than trivial since it concerned items which one group or the other considered important.

The twenty-six items are listed below. An asterisk indicates that the item was one of the three high rank items in that section of the checklist.

Ranked higher by Teachers

\mathbf{Type}	Year	Item
Goals	1	Get a driver's license *Win a scholarship so I can go to college Get any job that pays well To seem older and more confident
	5	*Make a lot of money *Get a car
	10	Have a job which people think important Be the foreman or boss on the job
Obstacles	1	I may be drafted
$\mathrm{Help_8}$	1	My parents won't agree with my choice I get help from my school or parents I work hard at school
	5	I will be in the service only a short time
	Life	I won't take a job without a good pension

Ranked higher by Senior Boys

Type	Year	Item
Goals	1	Work harder in school
	5	*Stay in good health Use my spare time to improve myself *Help to support my parents
	20 Life	Do my best to keep my family happy To be able to see my mistakes and correct them To have educated my children
Obstacles	5	*To repay my parents for all they have done I may not be in good health
Helps	10 1	I can't seem to manage money well My investments might not pay off *I have some experience in the work I want

These items, which the teachers and students ranked so differently, although relatively few in number, are quite different in content. One is tempted to ask whether the teachers were expressing their opinion of the students or whether they were trying to estimate the responses of the students. Likewise, were the senior boys honest in their responses or were they painting a flattering picture of themselves? Although there is no clear cut evidence on these questions, the informal responses of the teacher subjects to a summary of the findings indicated surprise and a willingness to reform teacher concepts of student goals. Likewise, the interviews and informal written reactions of the senior boy subjects to the anonymous checklist indicated that less than five per cent of the subjects were uncoöperative or capricious in their participation.

Male teachers vs. female teachers. The differences between the estimates of the male and the female teachers were few in number and indicated only slight trends. The men gave higher rankings to items relating to health maintenance, good school marks, peer approval and aid, self improvement and confidence. The women teachers gave higher rankings to items concerned with financial security, good citizenship and long range planning. These differences concerned only nineteen items and in no instance could a tributed to either sex. Briefly, there was more agreement between

Difference among subject teachers. The English teachers, more than the other teacher groups, tended to present a rather unflat-

tering selection of items which they believed the senior boys would have chosen or rejected. The social studies teachers tended to choose items which involved good personal relations and healthy self-appraisal and to reject items relating to long-term planning and the influence of school and home. The science and mathematics group were relatively more concerned with prestige and personal security items and tended to reject items of self-appraisal, personal assistance of others, health and athletics. The non-academic teachers tended to choose items which were worthy but did not have any strong characteristic pattern. The miscellaneous category of teachers had the greatest number of high-ranked and also of lowranked items in any group. The miscellaneous group had more extremes and tended to make estimates which were diametrically opposed to those of the English teachers. The miscellaneous category of teachers seemed the most willing to paint a glowing picture of the senior boys. This, however, was in a relative and not in any absolute quantitative sense, that is, when compared with the other teacher groups.

Vocational vs. Academic teachers. The three high-rank items on each section of the checklist for the vocational school teachers were compared with the three high-rank choices of the vocational school seniors. The probability of such a chance agreement or a closer agreement was computed for each group of three items. A similar procedure was carried out for the academic teachers and students.

A median test on the total distribution of probabilities of the academic and vocational groups then yielded a chi square of 4.26, which was significant at the .05 level. This rather insensitive test

Table III.—Probability of Agreement Between Teachers' and Senior Boys' Choices for Vocational and Academic Groups

	1 yr.	5 ут.	10 yr.	20 yr.	Life
Goals					
A	.010	.037	.004	.079	.018
V Obstacles	.184	.511	.358	.003	.018
A	.291	.018	.021	.004	.018
${ m V}_{ m Helps}$.455	.396	.021	.025	.0005
A	.021	.055	.079	.004	.021
V	.266	.055	.079	.291	.021

indicates significantly less accurate estimates by the vocational school teachers. Table III summarizes the probabilities of agreement for the three high-rank goals of the academic and vocational

groups.

Length of experience in teaching. The teachers, when grouped according to length of teaching experience, did not show any consistent trends on any items. There were large differences between the groups on many items but the rankings of the items did not follow any pattern which was apparently related to more or to less experience. The only minor trend concerned six items which indicated that the more experienced teachers did not tend to choose job-oriented immediate goals in estimating the responses of the seniors.

Teacher estimates and senior socioeconomic and mental ability levels. It was recognized that the teachers might tend to identify their own goals and problems on the checklist rather than those of the senior boys. If this was the case, it was hypothesized that the items characteristic of middle socioeconomic group and higher mental ability levels would be more frequently chosen. Therefore, the proportions of choice on those items which differentiated the senior boys with respect to the socioeconomic and mental ability on the same items.

There were thirty-eight items which showed differences between the socioeconomic levels of the senior boys. When the level with which the teacher estimate was in closest agreement was noted, the frequencies of agreement with each of the socioeconomic levels did not differ significantly from a hypothesis of equal frequency. In order of decreasing frequency of agreement the socioeconomic levels were 1, 6, 2, 3, 5 and 4.

When the same procedure was followed with the mental ability levels, the forty-five items were distributed so that there was no significant deviation from a hypothesis of equal frequency. The mental ability levels in order of decreasing frequency of agreement were IQ = 89 or less, 120-129, 110-119, 90-99, 130 and over, 100-109.

The findings with respect to this last section are not in agreement with the original hypothesis and even suggest the formulation of one which is antagonistic to the first one.

Discussion. The ability of the teachers to estimate the checklist

responses of the high school senior boys was evident. There were some few items or areas where reappraisal might be warranted. It seemed that these teachers were quite well aware of the goals, obstacles and helps of the senior boys whom they teach. Insofar as the checklist was a valid measure of these things, the teachers did exceptionally well. With respect to the teachers' tendency to underrate some of the more worthy goals, it could be an indication of the teachers' awareness of the difference between words and action and of their wider experience with human failings.

The lack of difference between the sexes is not easy to explain, especially in the light of the much greater differences between the subject matter categories. It seems that such a basic difference (sex) should result in response differences which were at least as great as those present in other less distinct classification methods. Is it necessary to consider teachers as subject-matter teachers before considering them as men teachers or women teachers?

Several other questions of this sort might also be pertinent.

Did the subject-teachers respond differently because:

(a) Senior boys as a group present a different picture of themselves in each subject matter area; or

(b) the teachers identified themselves with the checklist items and portrayed characteristic personality types for each subject matter area; or

(c) the particular values and goals of a subject area establish themselves as paramount in the eyes of the subject-matter teacher; and, in estimating the responses of the senior boys, the estimates became an expression of the conflict between the average person's values and those of the particular teacher?

The differences between the vocational and academic teachers' estimates were not directly comparable since the students taught are so different. However, the academic teachers were more accurate estimators. Perhaps this was due to the greater number of college-bound seniors in the academic schools and the resulting closer agreement between the immediate goals of the students and former goals of the teachers.

However, this latter hypothesis is not supported by a comparison of the responses characteristic of the brighter and higher socioeconomic level seniors with the responses of the teachers. From these latter comparisons it would seem that the teachers had a composite student in mind while completing the checklist.

Summary. A cheeklist was administered to 405 public high school teachers in two vocational and seven academic schools of the City of New York. The responses were compared with previously obtained responses of 485 senior boys in the same schools. The purpose of the study was to ascertain the ability of the teachers to estimate the responses of the senior boys whom they teach. The 193 item checklist was concerned with the immediate, intermediate and long-range goals, obstacles to the goals, and helps to the goals of high school seniors. The teacher responses were also compared for differences due to sex, subject taught, years of experience and type of school. The teachers' estimates were generally accurate with no outstanding differences due to sex or years of experience. The academic teachers were more accurate than the vocational teachers. There were many consistent differences between the responses of the subject-matter teachers. The teachers did not tend to make estimates which were characteristic of any particular socioeconomic or intellectual level of high school senior.

The conclusions which have been drawn in this present study would belie any "Ivory Tower" description of these high school teachers and their understanding of the students they taught. The major question which seems to have been raised by these conclusions relates to the causes of the response differences between

the teachers in various subject-matter areas.

REFERENCES

F. J. Crowley, "The Goals of Male High School Seniors," Personnel and Guidance Journal, 1959. 37, 488-92.

F. J. Crowley, The Immediate and Long Range Goals of Male High School Seniors and College Freshmen, Technical Report \$1, Office of Naval Research Control N. search Contract No. Nonr 880(02), Fordham University School of Educa-

F. J. Crowley, Teacher Estimates of Immediate and Long Range Goals of Male High School Seniors, Technical Report #2, Office of Naval Research Contract No. Nonr 880(02), Fordham University School of Education,

J. P. Guilford, Psychometric Methods, Second Edition, New York, Mcraw Hill 1954 Graw Hill, 1954.

THE TEACHER'S DAY: ANALYSIS OF PRO-FESSIONAL RÔLE PERCEPTIONS1

LAWRENCE W. DRABICK

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The study of human behavior can be approached within a variety of conceptual frameworks. One fruitful method is that which considers behavior as the dynamic manifestation of the status occupied by the person or group whose behavior is under scrutiny.

Status, as here used, does not pertain to prestige. Rather, it is a term devised by Ralph Linton to designate the particular position which a person occupies in a given society at a given time.2 According to this theory, any society is composed of a group of interactive and integrative positions which are historically necessary for the survival of the society. These statuses, to use Linton's term, exist as entities apart from the persons who fill them. Thus the status of doctor has meaning, life and validity independent of any particular doctor, as do the statuses lawyer, school superintendent, teacher, housewife and the multitude of others which exist in our society.

Associated with each status is a complex bundle of overt behaviors which constitutes the rôle, or the dynamic aspect of the status.3 As with statuses, rôles are historically derived and independent of the person to whom they accrue. For example, the doctor does not necessarily expose himself to contagious disease because he personally desires to do so. He performs that activity as part of the rôle expected of him as a participant in the doctor status. Likewise, school superintendents and teachers expose themselves to criticism by parents and other citizens as part of their rôles.

A rôle can be thought of as a set of expected behaviors imposed upon an individual by members of a society as a consequence of the status which he fills in that society. The rôle is understood by

a Ibid., p. 77.

Revision of a paper delivered before the 1959 meeting of the American Educational Research Association.

Ralph Linton, The Cultural Background of Personality, Appleton-Century-Crofts, Inc., New York, 1945, p. 77.

persons who do not fill the status as well as by those who do. While complete unanimity concerning any rôle is rare, a basic similarity of opinion will exist.

It is desirable at times to consider a rôle as a series of substructs. Lindesmith and Strauss have utilized the concept of rôle segmentalization to illustrate the variety of associated behavioral bundles to be found within any one rôle. For instance, they posit a general rôle of male, within which they locate such segmental

rôles as father, son and husband.4

The segmental rôles cannot always be performed simultaneously. Most men, for instance, would find it difficult to play the segmental rôles of wage earner and husband at the same time. Linton explains this apparent discrepancy with the concepts of active and latent statuses. By logical extension, an active rôle is that which is currently in effect, while a latent rôle is one which the individual commonly performs but which, not being appropriate to the situation, is held in abeyance.

Persons filling a rôle will be more or less aware of the segmentalization of the rôle in daily activity. They will recognize that all of the various behaviors associated with a general rôle are not engaged in continuously. Such recognition is concomitant with realization that rôle behaviors are latent as well as active and is associated with an ability to express a certain activity as

associated with a particular segment of the general rôle.

THE PROBLEM

It is possible to conceptualize a social structure composed of a diversity of elements, called statuses, to each of which inhere particular standards and norms of behavior which are incumbent upon its occupants. The status which will be considered here is that of the public school teacher.

It is theoretically possible to consider the allegedly unitary status of teacher as an agglomeration of statuses. One might conclude that the status of elementary teacher is not precisely the same as the status of secondary teacher. A complete arrangement of teacher statuses statuses, according to this reasoning, would range from first through twelfth grades. Such an arrangement, while theoretically

Alfred R. Lindesmith and Anselm L. Strauss, Social Psychology, The Dryden Press, New York, 1949, p. 171. Ralph Linton, op. cit., p. 78.

and metaphysically defensible, would be empirically inept. However, a classification which recognized the major administrative units of the educational structure would result in an empirically logical system. Such a system would provide elementary, junior high and senior high categories. Addition of a "special" category, to include teachers not engaged in the classic, academic subjects, such as vocational and guidance teachers, would result in a comprehensive and useful methodological model of teacher statuses.

The problem of this paper is that of determining the differences in the segmental "professional" rôle expressed by the occupants of the various teacher statuses. A discussion of some of the implications which inhere in the differences expressed from the various

teacher statuses will follow presentation of the findings.

Combined for the sake of simplicity, the hypotheses of the study

can be stated in null form as follows:

(1) There will be no difference in the amount of total profes-

sional rôle expressed from the various teacher statuses.

(2) There will be no difference in the amount of professional rôle expressed from the various teacher statuses when time is divided into during school and out of school periods.

METHODOLOGY

The data, of which this paper reports a part, were gathered by The Pennsylvania State University, in conjunction with the Office of Education, as a general study of the rôle of the public school teacher. Seventeen teachers were interviewed in each of sixty-six schools in Pennsylvania. Rural and urban schools were represented in about equal proportions. Enrollment in the sample school systems varied from about 200 to more than 10,000 students. The teacher sample at each school included five from elementary grades; three from junior high academic subjects; three from senior high academic subjects; and two vocational, two arts and music, one physical education and one guidance teacher. A total of 1107 interviews is reported.

As part of the interview, each teacher was requested to fill in a diary of his activities for the preceding day. Upon completion of

^e"Rôle Definition of the Teacher in the Public School System and Selected Aspects of Community Life." A coöperative research effort of the Office of Education and the Department of Agricultural Economics and Rural Sociology, The Pennsylvania State University.

the list, he was asked to designate each activity by means of the segmental rôle titles of "professional," "ideological," "bureaucratic," or "local citizen." The professional rôle, object of concern here, was explained as inclusive of those functions most closely associated with the procedures of transmitting knowledge and abilities within a formal institutional framework. It was also explained as inclusive of the technical aspects of becoming and being a teacher. It must be borne in mind that the data represent the expressions of the participating teachers. Each one was given essentially the same definition of the professional rôle, but each was free to determine which of his activities he wished to consider professional.

The number of hours and the per cent of time expressed as devoted to the professional rôle were calculated to each respondent. Division of time into during school and outside formal school hours was made. It therefore was possible to determine the amounts of professional activity expressed for the various time periods by the teacher statuses: elementary, junior high academic, senior high academic and special teachers.

The findings must be considered as conservative for the following reason. Some respondents placed more than one segmental rôle within a designated time period. Those units of time which contained more than one segmental rôle are not included in this report. The findings pertain only to that time which the respondents expressed as devoted solely to professional activity.

FINDINGS

Length of Day. The total length of day reported ranged from thirteen to twenty hours. The average day was 16.47 hours long for all teacher statuses. The average day was 16.47 hours for the day average day length varied from 16.31 hours for the elementary teachers to 16.54 hours for the special teachers. As tested by chi-square analysis, there were no significant different different analysis, there were no significant different cant differences in the length of day reported by the various teacher statuses.

Total Hours Expressed as Professional Activity. The total number of hours expressed as Professional Activity. The total from none to sight expressed as spent in professional activities varied from none to eighteen. For the entire sample, the average number of hours in professional activities of hours in professional activities was 6.52. Elementary teachers reported an average of 6.14 hours, junior high academic teachers reported 6.79 hours reported 6.72 hours and senior high academic teachers indicated an average of 6.54 hours spent in professional activities. For special teachers, the average was 6.72 hours.

Some of the differences in total hours of expressed professional activity were significant by chi-square analysis. The difference among all teacher statuses was significant at the .01 level. The elementary teachers differed from the junior high teachers at the .05 level and from the senior high teachers at the .01 level. There was no significant difference in the total amount of time expressed as professional activity by the junior high and senior high teacher statuses.

The special teachers differed from the academic teachers at the .01 level. This degree of significance prevailed when the special teachers were tested against all academic teachers as well as when they were tested separately against the elementary and the secondary teachers. No differences in the amount of total time expressed as professional among the special teachers were significant.

During School Hours Expressed as Professional Activity. Unlikely though it seems, some teachers indicated none of their time during the formal school day as devoted solely to professional activities. Others considered their total school day as such. The average number of during school hours expressed as professional activity by the entire sample was 4.78. Elementary teachers expressed 4.73 hours in professional activities during school, as compared to 5.04 hours for junior high academic teachers, 4.96 hours for senior high academic teachers and 4.62 hours for special teachers.

In this case, the difference among all the teacher statuses was significant at the .001 level. The differences between the elementary teachers and the junior and senior high teachers were significant at the .02 level in each instance. There was no significant difference expressed between the junior high and the senior high teachers.

The special teachers varied significantly from the academic teachers. The significance of the difference was the .05 level when compared to the secondary teachers and the .01 level when compared to the elementary teachers. Also, the special teachers differed among themselves in the expression of professional time during the school day. Both the vocational and the guidance teachers differed at the .01 level from the other special teachers. At the same time, the vocational and guidance teachers differed at the .001 level between themselves.

Out of School Hours Expressed as Professional Activity. The number of hours outside the formal school day expressed as spent in professional activity by the entire sample varied from no hours to eleven hours. The average number of hours for the sample was 2.09. The average number of hours varied among the teacher statuses; for the elementary teachers it was 1.79 hours, for the junior high academic teachers, 2.03 hours, for the senior high academic teachers, 1.93 hours, and for the special teachers 2.44 hours.

By chi-square analysis, the difference in amount of out of school time expressed as professional among all teacher statuses was significant at the .001 level. All this difference was concentrated between the academic and special teachers, where the difference was significant at the .001 level. There were no significant differences among the academic teacher statuses or among the special teacher

Both the null hypotheses were found untenable as stated. Significant differences occurred in the total amount of time expressed as professional by the various teacher statuses. Significant differences in the amount of time expressed as professional were present when time was divided into during school and out of school

The direction of the observed differences cannot be determined by chi-square analysis. However, detailed analysis of the data indicates that the least amount of total time expressed as professional activity sional activity accrues to the elementary teachers. Junior high and special teachers were united in expressing the greatest amount of total professional time while the senior high teachers expressed an intermediate amount.

Ranking of the amount of during school activity expressed as professional followed a different pattern. In this instance, the special tanches cial teachers ranked slightly lower than did the elementary teachers. The control of the control ers. The secondary teachers attained the highest ranks, with the junior high teachers expressing the greatest amount of during school professional activity by a slim margin.

The pattern changed again as consideration was given to the hours expressed as professional outside of school hours. In this instance the all instance, the elementary teachers ranked lowest, followed by the senior high, junior high and special teachers in that order.

The differences in expressed professional activity between junior and senior high teachers was not significant, whether expressed

for total, during school or out of school time. As regards expressed professional activity these two teacher statuses can be considered one.

Certain other of the data, while not utilized for statistical presentation, seems meaningful as an indicator of the teacher's perception of his professional rôle. Prominent in this category is the percentage of teachers who expressed no or little activity as solely professional.

Eight per cent of the total sample expressed no professional activity whatsoever. Twenty-eight per cent expressed four hours or less of their daily activity as professional. If activity during school is considered, the data indicate that 12% of the teachers in the sample considered none of it as professional, while 35% expressed four hours or less of professional activity. The data are yet more revealing when out of school activity is investigated. In that category, 22% of the sample expressed no professional activity. Inclusion of those who expressed one hour of out of school activity as professional resulted in inclusion of 46% of the sample.

These data lead to an inescapable conclusion that many teachers do not regard their activity, in or out of school, as professional. Still more teachers regard very little of their activity as professional. One is led to conclude that, for many teachers, perception of the teacher in a professional rôle (i.e., as a professional person participating in a professional occupation) is very weak.

IMPLICATIONS

There is some doubt whether education legitimately can be called a profession. Lieberman, in his book, Education as a Profession, has stated the present condition of the educational structure and the criteria it must meet if its practitioners are to be considered professionals. In his discussion of the problems pertinent to professionalization of education, he quite properly stated that, "teachers cannot expect to achieve professional status until the teachers themselves participate in the drive toward professionalization." This statement has certain implications relative to the rôle theory and the data of this paper.

By logical extension of the theory presented here, the generic noun "professional" can be considered a status with which is as-

Myron Lieberman, Education as a Profession, Prentice-Hall, Inc., Englewood Cliffs, New Jersey, 1956, p. 13.

sociated a "professional" rôle. If education is to achieve the distinction of being a profession, its practitioners must, concomitant with their status as teachers, assume a status as professionals. This cannot be done independent of society. As previously stated, ascription of status resides in the general society and is not a function of would-be occupants of a status. However, it is possible for persons seeking a particular status to act so that their behavior will be perceived by society as indicative of participation in the desired status. Self-perception as professional, by teachers, together with expression of the behaviors identified with that status, would serve to advance professionalization of education.

Two inferences relative to that end are inherent in the data of this paper. First, by their own expressed evaluation of their activities, the elementary teachers are generally doing least to create an impression of an educational profession, while special teachers are doing most toward that end. Second, until teachers engage in more out of school activities which they express as being professional, they will have little claim to be regarded as members of a profession comparable to those of medicine, law

or the ministry.

In regard to further research in this area, a similar study of the evaluation by school administrators of their own activities as "professional" or otherwise might throw additional light upon the whole problem.

THE BEHAVIORAL CHARACTERISTICS OF EFFECTIVE EDUCATIONAL ADMINISTRATORS

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The problem of selecting school principals, supervisors and various administrative assistants has plagued school superintendents and boards of education for many years. School superintendents often find themselves in a state of indecision when forced to decide among numerous applicants for an administrative position. Many applicants may appear equally desirable "on paper" and seem to be a good bet in an interview situation. All too often the superintendent of schools may decide among "equally qualified" applicants on the basis of "experience" or subjective impression. Subsequently he may find that he has selected a person ill-fitted

for the position.

Professors of school administration are or should be faced with the problem of selecting prospective good school administrators. Oftentimes the decision is made on standards of academic proficiency as measured by one or more objective tests. Rigid adherence to academic proficiency may turn up good prospects, but also among the lot are numerous "odd balls," misfits or persons who are for other reasons unsuccessful as administrators. Recognizing this problem many departments of school administration have added interviews, statements of references and other such devices in an attempt to get judgments of personality attributes. These attempts are often fraught with subjectivity because persons interviewing applicants possess no body of proven criteria regarding the characteristics necessary for effective school administration

Fortunately, more and more research is being aimed at defining the kind of person who is likely to be effective as a school administrator. The staff of the Department of Educational Administration

¹ Dr. Kimbrough was a member of the staff, Department of Educational Administration, University of Tennessee and served as coördinator of the study partially reported in this article; Dr. Kimbrough is now Associate Professor of Education, University of Florida.

and Supervision at the University of Tennessee has conducted research for the past six years dealing with the question of what behavioral characteristics differentiate between effective and ineffective school administrators. The Tennessee project, supported jointly by the University of Tennessee and the W. K. Kellogg

Foundation, has revealed some promising findings.

The Tennessee Staff began with the assumption that there are behavioral characteristics which can be described which differentiate between effective and ineffective school administrators. In approaching the task of defining effective and ineffective behavior, the Tennessee research staff attempted to define behavior which was most basic to the personality structure of the individual in terms of the job to be performed. The staff went far beyond earlier attempts to define personal effectiveness in terms of such things as dress, general poise with people, public speaking ability, intelligence, and other general qualitative descriptions.

The first step taken in the Tennessee project was to involve numerous educators and representatives from basic disciplines in an attempt to gain consensus regarding behavioral statements which might differentiate among effective and ineffective performance for school administrators. This involved a careful analysis of previous research dealing with the problem. The statements which emerged were subsequently incorporated in an instrument which became known as the Tennessee Rating Guide. The staff has invested much time and effort in determining the validity of this rating instrument.

VALIDITY OF THE RATING GUIDE

The Tennessee Staff began early in the project to put the original rating instrument to the acid test in the field to determine its validity. The first guide consisted of seven divisions with more than 185 cumbersome statements representing varying levels of effectiveness. The present guide known as the Tennessee Rating Guide consists of six divisions and 125 discrete statements of varying degrees of effectiveness.

A study, typical of one approach to validate the Tennessee Rating Guide, involved asking three system-wide school administrators of a large school system to place school principals in their schools into three categories as follows: (1) The sixteen most ef-

fective principals in the system; (2) the sixteen least effective principals in the system; and (3) those who appear to be neither particularly effective nor ineffective. The sixteen effective and sixteen ineffective principals were rated in the field on the Tennessee Rating Guide by persons who were unaware of how the principals had been placed by the system-wide administrators. These data were carefully analyzed to determine which items on the rating guide clearly differentiated between the effective and ineffective principals in the study.

Another approach to validate the Tennessee Rating Guide was national in scope. Professors of school administration at various institutions of higher learning in the United States were asked to select three competent school administrators in their respective areas. Each of these "competent" school administrators was then asked to rate on the Tennessee Rating Guide one of the "most" effective and one of the "least" effective school administrators

with whom he had worked.

Other studies to validate the Tennessee Rating Guide employed on-the-job descriptions of school administrative behavior in critical problem situations. Through using the results of the various validation studies the validity of the original rating instrument was greatly improved. In some instances items in the instrument failed to differentiate between groups of effective and ineffective school administrators. These items were deleted from the guide. All other items were carefuly reviewed and revised in order to

strengthen the instrument.

The validation studies, in addition to showing characteristics which did tend to differentiate, revealed certain areas of behavioral characteristics which failed to distinguish between the two extremes. In some instances this was due to inability to rate a person on the given series of statements. In others, even though reliable ratings were possible, the statements simply failed to show a differentiation between effective and ineffective school administrators. One such area was the condition of physical fitness or health. It now appears that many effective school administrators may be characterized as paying little attention to their health, some suffering conditions bordering on chronic health deficiencies. Of considerable surprise to the Tennessee research staff was the fact that certain categories of behavioral statements relative to

emotional condition failed to show a distinction. For example, it has long been thought that recreational activity as a release from intellectual fatigue is necessary to effectiveness. The Tennessee study failed to support this notion.

STATEMENTS DESCRIPTIVE OF EFFECTIVE AND INEFFECTIVE SCHOOL ADMINISTRATORS

Enough data have been collected through the development and use of the Tennessee Rating Guide to allow considerable description of the effective school administrator in behavioral terms. In order to conceptualize the effective school leader, it will be necessary to deal also with the characteristics of ineffectiveness in the following paragraphs. In the space below there are two columns of selected illustrative statements taken directly from the Tennessee Rating Guide. The first column is descriptive of the most effective administrators rated in the Tennessee study. The second column represents behavior of the least effective administrators studied.

Characteristics of Most Effective School Administrators

Steadily warm and appealing in relationship with others.

2. Consistently seeks and considers the opinions of others.

 Moves surely and judiciously in effecting policies.

4. Urges the use of processes consistent with best democratic practices.

 Recognizes and analyzes problems.

- 6. Is dependable and predictable in word and action.
- Tends to try out new ideas after careful study and follows through on basis of experimental evidence.

 Recognizes his mistakes and seeks to avoid repeating them.

 Appears to meet crises with a contagious calmness; others feel at ease in his presence. Characteristics of Least Effective School Administrators

- 1. Tends to be a lone wolf.
- 2. Generally ignores the viewpoints of others.

 Tends to ignore or defer action on policies.

4. Uses any expedient method available to attain a predetermined end.

 Tends not to recognize the existence of problems.

6. Supports conflicting ideas; action characterized by inconsistency.

7. Tends to operate within traditional practices or on basis of hunckes.

8. Frequently makes the same mistake but seldom admits it.

 Tends to be upset by everyday occurrences and keeps staff in continuous uproar.

- personal advantages.
- 11. Chooses words which clearly convey thoughts; is able to express abstract ideas.
 - 12. Is attentive in trying to grasp ideas expressed by others.
 - 13. Facilitates a stimulating and well-ordered climate conducive to reaching group decisions.
 - 14. Involves general public, staff members in major policy formulation.
 - 15. Continually strives for careful group problem analysis; helps group recognize points of agree-
 - 16. Consistently seeks and employs new data.
 - 17. Discusses intelligently major social, political and economic issues
 - 18. Is aware of and actively concerned with desires and interrests of community groups, agencies and organizations.

- 10. Places principle above his own 10. Tends to weasel out of situa-
 - 11. Expresses himself in a fuzzy, incomprehensible manner tends to puzzle listeners concerning what he means.
 - 12. Tends to listen only to himself.
 - 13. Is either at a loss or monopolizes discussion when appointed official leader of a group.
 - 14. Formulates policies himself: rarely discusses them with others.
 - 15. Contributes little to help group arrive at a working consensus.
 - 16. Disregards new data that challenge the status quo.
 - 17. Does not seem to be informed about or interested in contemporary events.
 - 18. Considers the school an island that is competitive with noneducational groups.

The above statements are thirty-six of a possible 125 statements of varying effectiveness incorporated in the Tennessee Rating Guide. A person need not and probably could not exhibit the most effective behavior in all areas. However, studies using the instrument indicate that even though a person may be rated low in some instances, he must rate generally high on the total guide in order to be effective.

Through extensive on-the-job visitations to rate school administrators it is possible to cite instances in which effective and ineffective characteristics were in evidence. In the following sections a narrative description of both extremes is attempted.

EXAMPLE OF AN INEFFECTIVE ADMINISTRATOR

In the following paragraphs an account is given of a staff visit with a school principal who was judged ineffective by his superiors. A summary paragraph at the end of this section points to some behavioral statements in the Tennessee Rating Guide which parvisits corroborated the above brief account and pointed to the following kinds of statements of behavioral characteristics: (1) Formulates policies himself (in the above incident Mr. A wrote a handbook and imposed it on teachers. In other instances Mr. A was observed to make policies in the absence of coöperative help from others); (2) Runs the whole show himself (No delegation of responsibility in evidence in the above account of Principal A. Things appear to be in a state of disorganization); (3) Attempts to maintain outward calmness but explodes about trivial details (Interviews with teachers indicated the emotional outburst over the field trip in the above described episode was not uncommon); (4) Frequently makes the same mistake but seldom admits it (Mr. A censured colleges in general for his own repeated mistakes in hiring teachers.) These statements characterizing Mr. A are only a few which are incorporated in the Tennessee Rating Guide.

STATEMENT CHARACTERIZING AN EFFECTIVE ADMINISTRATOR

Principal A in the above episode has opposites as revealed by many observed incidents of effective administrative performances. During the study of school administrators in the field, the Tennessee Research Staff made it a practice to talk with several persons in job association with the person being observed. A teacher gave the following narration of his principal:

Mr. X is the best principal with whom I have worked. I just put him at

the top of the list. He is great.

I can give you one good example of why I think he is such a good principal. If we have a disagreement he takes it to staff meeting and we finally thrash it out. Just last spring we got all bothered about grades. Some teachers wanted to record letter grades and others wanted numerical marks. Mr. X came into faculty meeting and stated the problem. After talking about the problem briefly, he just leaned back in his seat and asked, "What do you want to do should have want to do about it?"

You should hear one of these faculty meetings sometime—downright comical when you look back on them. Those old sisters get to going and shake their first at and like their first at any like the like their first at any like the like the like their first at any like the shake their fists at each other. You have never heard such an argument. Mr. X just leave heart such an argument. X just leans back and lets them go. But the surprising thing about it is we finally come out of the surprising thing about it is we is made. People seldom feel hurt after it is over. If you had told me a person could do this more than a person could be a person could could do this way before he came here, I would have said you were crazy. He has a bundled He has a hundred per cent backing of his faculty. Students like him too.

He always works to improve things. This school was run down at the heels when he came here. Parents were not interested. Students were unimpressed with school. Teachers were just going through the motions. Largely through his help we are now organized and at least think we know what we are doing. The gripe sessions are gone. Oh! of course, we complain about petty things,

but I mean the chronic complaints.

For one thing the custodians were always fighting among each other and with teachers. The school building was filthy. You know what I mean. The toilets smelled to high Heaven. Mr. X talked to the custodians first. They began to work on a way to divide up the work. Mr. X was instrumental in getting someone from the state department to come in and of all things they had a custodian's school for the whole county. Then we had a joint meeting of the faculty and custodians. Even some students were invited. Mr. X presented a plan for keeping the building in order that he had worked out with the custodians. They had the neatest drawings of the school you have ever seen with indications of who would be responsible for what. Although it looked good to all of us, we thought it was just another straw in the wind—would soon blow over. It did not. We have the cleanest building in the county. He went to bat for us and got the building painted too. He is not afraid of going after anything for us if we believe in it. There is no more of this on again off again big I and little you.

From the descriptions of Mr. X by one teacher, one can begin to see several characteristics that differentiate Mr. X from Mr. A in the preceding section. It should be emphasized that such reports were only used to corroborate actual observations of behavior in one phase of the Tennessee study. Repeated observations pointed conclusively to characteristic behavior implied in the teacher's account. Some of these were: (1) Mr. X continually strives for careful group problem analysis; helps group recognize points of agreement; (2) Most people with whom he works have important responsibilities in which they are genuinely interested; (3) Attempts to involve staff members and students in major policy formulation; (4) Facilitates a stimulating and well-ordered climate conducive to reaching group decisions; (5) Moves surely and judiciously in effecting policies.

THE EFFECTIVE EDUCATIONAL ADMINISTRATOR

Having examined selected statements of behavioral characteristics and having seen them demonstrated in two accounts of administrative behavior, it is now possible to proceed with an abstract summary of the characteristics of the effective school stract summary of the characteristics of the effective school administrator. This can be generally categorized under the paragraph headings which follow.

Interpersonal Relations. The effective school administrator instills close interpersonal relations with and among the group in-

volved in the administrative endeavor. He promotes closeness as opposed to promoting distance between people. His constituents speak of him with a striking absence of defense. He helps groups organize in terms of purposes, interests and special abilities in order to fully release and achieve the coöperative utilization of the intelligence of the immediate group. The staff with whom he works reflects the stability and morale which accrue from judicious implementation of coöperatively developed school policies, plans, and procedures. The effective school administrator urges

the use of processes consistent with democratic values.

Intelligent Operation. Effective educational administrators are critical in the identification and definition of educational problems in their situation. In fact, much of their discussion with people centers around problems about which they are seeking solutions. The effective school leader is consistent in terms of basic educational beliefs and has considerable ability to discuss why he took certain past actions as a person. He is especially cognizant of the special abilities and skills among the school staff. The effective school leader seldom repeats a mistake. In fact, he appears to have generally profited in increased understandings and skills as a result of recognizing personal mistakes. The effective educational administrator appears to have carefully reflected on his own status position and has assumed responsibilities commensurate with the truly important functions inherent in the status position.

Emotional Stability. The statement characterizing the most effective administrator on the Tennessee Rating Guide states, "Appears to meet crises with a contagious calmness; others feel at ease in his presence." Obviously this is not a characterization of the excitable person who shouts "fire" in a crowded gymnasium. However, it is just as important to see that this statement should not be interpreted as characterizing a moron who does not have enough insight to get excited. Anyone who has had experience with such a status leader will quickly recognize that he fails to promote a "contagious calmness" among a group. In fact, just the opposite is generally true in a crisis situation where no insightful leadership is present. The effective educational administrator confidently analyze a crisis.

Ethical and Moral Strength. The effective educational adminis-

trator tenaciously follows the truth as opposed to expediency as a means of action. He has definite, personally understood convictions and is willing to abide by them even though such action may not always be personally beneficial to him. This does not imply that he is a "pig headed" individual who insists that he has the truth yet refuses to have his truths examined experimentally. The effective educational administrator arrives at his truths through the coöperative use of experimentation. He may be observed publicly to admit he is "wrong" in the light of new evidence. No one doubts the effective educational leader's intentions in view of his high integrity. The staff members feel assured that he will not intentionally violate staff agreements reached through the coöperative use of intelligence.

Adequacy of Communication. The effective educational administrator promotes excellent communication in and among the group involved in an endeavor. One observes that he is effective in communicating abstract ideas to individuals and groups. In addition to his ability to clearly convey his position to others, he is a good listener. Listening is one of the qualities of communication which many people overlook in prospective administrators. The Tennessee study indicates that the ability to listen, to grasp ideas expressed by others, is one of the characteristics necessary for success in school administration. The effective educational administrator interests people in and stimulates their considered analysis of new ideas in education. This is an element in his ability to communicate with people effectively. Finally, the effective educational administrator facilitates group communication and discussion through a climate conducive to reaching group decisions. He is highly skilled in helping discussion groups recognize and accept points of agreement through democratic processes.

Operation as a Citizen. Effective educational administrators are well informed about significant social, political, and economic trends and events which affect education. For example, they discuss intelligently the possible educational implications of such developments as automation in industry. They understand the importance of the school as an agency to improve living in the community and generally believe in the rights of all community groups to have a voice in the operation of the public schools. The effective school administrator has a working knowledge of the im-

portant community agencies and forces which affect education. In effect he is looked upon as one of the important leaders in the community,

ARE BEHAVIORAL CHARACTERISTICS THE ONLY DETERMINANTS OF EFFECTIVENESS?

The Tennessee staff does not contend that the quality of behavioral characteristics incorporated in the Tennessee Rating Guide are the only factors which determine effectiveness. For example, there is the matter of knowledge of the job to be performed. Certainly an effective school administrator needs a degree of sophistication in functional knowledge in the field of school administration. Since much of the experimentation at Tennessee has been toward selection of people at the pre-service level, it was not feasible to test for the degree of knowledge about the job. One would not expect pre-service students to possess a great body of knowledge about the field of school administration.

On the other hand, it is the considered opinion of the staff that a person with the effective behavioral characteristics described herein will tend to avail himself of the knowledge necessary to perform well on the job. An individual cannot define problems, experiment, interest others in ideas and profit from previous experience without assimilation of knowledge about any field of

endeavor.

Looking at the problem from another standpoint, a person with ineffective behavioral characteristics may accumulate much abstract browled stract knowledge of the field of school administration and still fail to perform adequately the tasks of school administration. In fact, certain subjective evidence in the Tennessee study indicate

this to be a strong hypothesis.

The Tennessee project has revealed that behavioral characteristics appeared. tics apparently make a difference in the degree of success a person enjoys in educational administration. Furthermore, the Tennessee Rating Guide appears to measure some areas of behavioral characteristics which are most critical. It appears that the findings in the Tennessee project have important implications for the preservice selection and training of school leaders. There is strong indication that the findings may in the future be of help to practicing school ticing school administrators in the matter of filling administrative positions within their organizations.

HOW USEFUL ARE STANDARDIZED PSYCHOLOGICAL TESTS IN THE SELECTION OF SCHOOL ADMINISTRATORS?

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The arbitrary use of standardized psychological test scores for the selection of potential school administrators seems to be a highly questionable practice. The foregoing general conclusion was reached by the staff of the Educational Administration and Supervision Department of the University of Tennessee following approximately six years (1952–58) of research relating to the use of psychological tests in the selection process for school administrators. This might have been anticipated as psychologists have emphasized in the literature the undesirability of such practices.

The need for effective "usable devices" to assist in the selection of persons for leadership positions has long been recognized. This need has become increasingly more critical in the area of school administration since training facilities are limited and there is an ever-growing demand for effective leadership in school administration. Thus, in recent years, there has been tremendous emphasis on improving selection procedures. This has resulted in a "trying out" of various selection procedures. One of the more frequently used procedures is a battery of psychological tests of some description.

It is feared that in far too many instances standardized psychological tests have been incorporated into the selection process without securing adequate data relative to the validity of the judgments made through the use of the tests. That is, in many cases psychological tests are incorporated into the selection process and are assumed to be valid instruments in the situation. In those cases where the validity of predictions based on the use of psychological tests has been checked through the use of external criteria, such as superiors' and peers' opinions of performance onthe-job, the results appear to be inconclusive. More specifically, there is no research known to the writer which offers conclusive

proof for or against the use of any standardized psychological tests in the selection of potential effective school administrators. However, one does hear many opinions relating to the problem.

Faced with a lack of conclusive research evidence, in 1952 the staff of the Department of Educational Administration and Supervision at the University of Tennessee began to experiment with the use of psychological tests to select potential effective school administrators. In the ensuing years three separate research projects were conducted in this area. The over-all purpose of each of these projects was to identify psychological tests, or parts thereof, which would select persons who possessed characteristics determined to be desirable for effective school administrators.

CRITERION USED IN THE PROJECTS

The assumption that psychological tests were valid for the prediction of effective school administrators when judged to be so by a panel of "experts" could not be accepted by the staff of the Department of Educational Administration and Supervision at the University of Tennessee. Therefore, it became necessary to develop external criteria for determining the extent to which an individual possessed the characteristics necessary to be an effective school administrator. One such criterion, known as the Tennessee Rating Guide, was developed. This instrument was used as the criterion in the three studies conducted.

It is not the purpose of this article to discuss fully the development and validation of the Tennessee Rating Guide.¹ However, it should be pointed out that the instrument is a result of six years of research and has been revised on several occasions in light of research findings. There have been several studies conducted to establish the empirical validity of the instrument and several studies to check its reliability. It is felt that these studies have established the validity and reliability of the instrument to a sufficiently high degree to warrant its use as a criterion measure.

In using the Tennessee Rating Guide to rate an individual's operational behavior the "team rating" method was used. The

Discussion of the Tennessee Rating Guide is completely covered by Ralph B. Kimbrough's "The Behavioral Characteristics of Effective Educational Administrators" which precedes this article in Educational Administration and Supervision, November, 1959, p. 337.

team rating method consisted of at least two members of the staff of the Department of Educational Administration and Supervision visiting an individual in his on-the-job situation to observe him, talk with peers and supervisors, and use any other method necessary to gain insight into the individual's operational behavior. Following the visit there was a "pooling" of knowledge by members of the staff about the individual's operational behavior and agreement was reached on a rating for each item contained in the Tennessee Rating Guide.

A VARIETY OF STANDARDIZED PSYCHOLOGICAL INSTRUMENTS USED

In attempting to find devices that would discriminate between effective and ineffective school administrators a rather wide assortment of standardized instruments was used. These included "so called" tests of intelligence, aptitude, achievement, attitude, personality, interests, and values. Group tests, as well as individual tests, were used.

In the first project, reported in the form of a doctoral thesis by Moffett, a group of thirty-four Master's students were administered a battery of nine standardized instruments.2 This battery

included:

Allport-Vernon Scale of Values.

Attitude Questionnaire (unpublished)

Coöperative English Test (Mechanics and Effectiveness of Expression)

Kuder Preference Record-Vocational

Miller Analogies Test

Minnesota Teacher Attitude Inventory

Opinion Scale (unpublished)

Rorschach Test

Watson-Glaser Critical Thinking Appraisal

In the second project, reported by Luton, a total of sixty-three Master's students were involved.3 This group was administered a

James N. Luton, "A Study of the Use of Standardized Tests in the Selection of Potential Educational Administrators," (Unpublished doctoral the-

sis, University of Tennessee, March, 1955).

² Charles R. Moffett, "Operational Characteristics of Beginning Master's Students in Educational Administration and Supervision," (Unpublished doctoral thesis, University of Tennessee, June, 1954).

battery of tests which was, with one exception, identical to the battery used in the first project. The "F" Scale was substituted for the unpublished "Opinion Scale."

Utilizing thirty-five practicing school administrators as subjects, the third project, reported as a doctoral thesis, involved the use of a battery of seven tests. Included in this battery were:

Allport-Vernon-Lindzey Study of Values

Coöperative English Test (Mechanics and Effectiveness of Expression)

Edwards Personal Preference Schedule

Miller Analogies Test

Minnesota Teacher Attitude Inventory

Thurstone Temperament Schedule

Watson-Glaser Critical Thinking Appraisal

Techniques of Handling Data Differed

In no two of the projects was the same method of statistical analysis utilized. In the first project the Pearson Product-Moment Coefficient of Correlation Technique was used in an attempt to determine the relationships between the scores on the psychological tests and success on the job as determined by a rating on the Tennessee Rating Guide. That is, correlations were computed between each test, or sub-test score, and each section of the Tennessee Rating Guide.

The Kelly critical ratio technique was used to analyze the data gathered in the second project. That is, as rated on the Tennessee Rating Guide, the top 27 per cent (upper group) and the bottom 27 per cent (lower group) of the sample were utilized for comparative purposes. Comparisons of the mean test scores of these groups were made for each section of the Tennessee Rating Guide.

As less rigid assumptions were necessary, nonparametric statistical techniques were used for analysis of the data in the third project. To be more specific, nonparametric statistical techniques focus on the order or ranking of scores, not on their numerical value, and it is not necessary to make numerous assumptions about the data to be treated. For example, it is not necessary to

^{&#}x27;Michael Y. Nunnery, "A Study in the Use of Psychological Tests in Determining Effectiveness and Ineffectiveness among Practicing School Administrators," (Unpublished doctoral thesis, University of Tennessee, June, 1958).

assume that the subjects, such as school administrators, are representative of the normal population. Also, due to the nature of the data, two techniques were utilized. For certain sections of the Tennessee Rating Guide the Kruskal-Wallis One-way Analysis of Variance Test was used and for the other sections the Mann-Whitney U Test was used. The use of the two techniques did not seem to be inappropriate since the rationale underlying both techniques is the same.

RESULTS WERE INCONCLUSIVE

The results of the projects designed to determine the predictive value of selected standardized psychological instruments were inconclusive and somewhat conflicting. In the first project there were 144 correlations computed between the various test and subtest scores and sections of the Tennessee Rating Guide. Of these 144 correlations, seventeen were significant. There was no single instrument that showed a significant relationship with all sections of the Tennessee Rating Guide. There was no apparent pattern to the significant correlations. For example, there was a significant correlation between the computational variable of the Kuder Preference Record and the section of the Tennessee Rating Guide dealing with democratic operational behavior. Other instruments which showed a significant correlation with one or more sections of the Rating Guide included: Economic, Social, and Aesthetic variables of the Allport-Vernon Study of Values; Miller Analogies Test; Opinion Scale; Rorschach; and Watson-Glaser Critical Thinking Appraisal.

The results of the second project, concerning tests which were significant for differentiating between groups determined to have different behavioral characteristics as measured by the various sections of the Tennessee Rating Guide, are probably best sum-

marized by Luton as follows:

From these data it was evident that there are five tests which are significant in differentiating between groups judged to be different in "democratic operations," seven for "intelligent operations," eleven for "adequacy

of communication," and six for "operation as a citizen."

The Watson-Glaser Critical Thinking Test was significant in differentiating between groups judged to be unlike in areas of behavior described under four sections of the Rating Guide; Miller Analogies and Cooperative English (Expression) significant for three sections; the Minnesota Teacher Attitude Inventory, Coöperative English (Mechanics), "F" Scale, Kuder Preference (Music and Computational), Allport-Vernon Study of Values (Economic

and Aesthetic) are significant for two sections.

This study shows that certain psychological areas, or parts thereof, are significant in certain areas in differentiating between groups judged to be different in certain characteristics.⁵

With somewhat promising results from the first two projects, a third project was undertaken. Using only practicing school administrators as subjects and a further validated Tennessee Rating Guide, it was hoped that this research would substantiate the re-

sults obtained in the first two projects.

An analysis of the data obtained in the third project revealed that of 231 possible relationships between the administrators' test scores and their ratings on the various sections of the Tennessee Rating Guide twenty relationships were found to be significant at the .05 level of confidence. There were no significant relationships at the .01 level of confidence. Four tests were significant for differentiating between groups judged to possess different operational behavior in the area of "interpersonal relations" (previously called "democratic operation"), two for "intelligent operation," four for "emotional stability," two for "ethical and moral strength," two for "adequacy of communication," three for "operation as a citizen," and three for the Tennessee Rating Guide as a whole.

The Intraception variable of the Edwards Personal Preference Schedule was significant for differentiating between groups judged to possess different operational behavior in five categories of the Rating Guide, including the Rating Guide as a whole; the Endurance variable of the Edwards Personal Preference Schedule was significant for four categories, including the Guide as a whole; the Mechanics and Expression variables of the Coöperative English Test, the Order variable of the Edwards Personal Preference Schedule, the Economic and Religious variables of the Allport-Vernon-Lindzey Study of Values, and the Active, Stable, Reflective, Dominant, Vigorous, and Sociable variables of the Thurcategory of the Rating Guide.

It was noted that the results of this project failed to substantiate the findings of the first two projects to any significant degree. However, it was concluded that of the tests used the Thurstone

E Luton, Ibid., p. 58.

Temperament Schedule and the Edwards Personal Preference Schedule seemed to be most promising for differentiating between persons who had been determined to possess different behavioral characteristics by a rating on the Tennessee Rating Guide.

WHAT NEXT?

After reviewing the three projects just described, one is likely to ask, "What does it mean? What do you do next?" Neither of

these questions is simple to answer.

Probably at best the data are inconclusive. Promising psychological tests, such as the Miller Analogies and the Watson-Glaser Critical Thinking Appraisal, from the first two projects failed to show any significant relationships with field ratings used the Tennessee Rating Guide in the third project. In all the projects the Coöperative English Test (Mechanic and Expression) and certain variables of the Allport-Vernon-Lindzey Study of Values appeared to have some predictive value relative to the performance of school administrators. However, in the third project there was no instance where either of the forementioned tests was found to have a significant relationship with the specific categories of the Rating Guide designated by project one or two. Two instruments, the Edwards Personal Preference Schedule and the Thurstone Temperament Schedule used in the third project, showed considerable promise. However, to include these in a selection process without considerable substantiating evidence would be sheer folly.

The staff of the Department of Educational Administration and Supervision at the University of Tennessee has reached the general conclusion that there is no single instrument which can serve as a best predictor of effectiveness as a school administrator. Furthermore, based on the research conducted, it has concluded that no instrument used has been validated by use of external criteria to sufficient degree to justify its inclusion in the selection process

for school administrators.

If one accepts the assumption that the external criterion (the Tennessee Rating Guide) used in the projects was valid, there ap-Dear to be three directions that one can take from here. First, further research of similar design using the Edwards Personal Preference Schedule, the Thurstone Temperament Schedule, and other previously untried instruments, such as the Wechsler Adult Intelligence Scale, could be undertaken. Second, using appropriate

data the development and validation of a standardized instrument for the specific purpose of measuring the degree of effectiveness in school administration could be undertaken. Third, assuming that use of standardized instruments for selection in such a complex situation would never be feasible, the research efforts in this area could be abandoned.

Even though faced with the situation described in this article, it is the opinion of the staff of the Department of Educational Administration and Supervision of the University of Tennessee at the present time that some form of "testing" could be found or developed that would have an appropriate place in an adequate selection process. Therefore, it is felt that one of the first two courses of action outlined above would be a more defensible "next step."

INTEGRATING THEORY AND PRACTICE IN SCHOOL ADMINISTRATION

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Within the past decade the value of laboratory experiences in teacher education has been generally recognized. Many colleges have implemented this concept within their preparation programs for teachers.

After several years of experimentation, Appalachian State Teachers College has instituted a full program of laboratory experiences on the undergraduate level. Recently, experimentation was begun with the provision for field experience in the graduate program, especially in the area of preparing school administrators. This article is a description of one experiment in providing actual experiences in a school administration course, "Problems of the High School Principal."

In reference to the instructional process, the writer subscribes to the following thesis: the best teaching-learning situation results when direct experiences can be correlated with the theory being taught and when guided practice can be provided under the supervision of the class instructor. Under such an organization, the vicarious and the actual proceed hand in hand, each enriching the other.

Serving in the dual rôle as principal of the laboratory high school and instructor in school administration for Appalachian State Teachers College, the writer was in a strategic position in terms of providing for integration of theory and practice. For several quarters, within the framework of the course, opportunities were provided for graduate students to participate in the laboratory high school program, to see the administrative process at work, and to assume some actual administrative responsibilities.

Obviously not all of the content of any course could be integrated completely with field experiences. These areas of the course were handled by more conventional procedures such as lectures and class discussions. The nature of a course in the problems of the high school principal, however, lends itself to flexibility in terms

of selection of content. This enabled the instructor to take up certain problems in the course as they arose in the field situation. In this manner, much of the course was correlated with actual experiences which arose from within the operation of the school.

The degree of responsible participation in actual administrative problems also has its limitations. Certain activities in which graduate students participated were not as important in themselves as in the meaning and vitality they gave to class discussion.

Aside from the desire to implement a theory of teaching, other factors contributed to the decision to experiment with a new teaching approach. The college staff was involved in a self-evaluation study of its preparation program for school administrators. According to a research study¹ of the problems of beginning principals who were recent graduates of Appalachian State Teachers College, these principals believed that much of their course-work should be made more practical and that the provision of laboratory experiences would have been valuable.

One of the areas in which beginning principals felt most inadequately prepared was in bookkeeping, reports, and records. Beginning principals have enough adjustments to make without

being unfamiliar with and unskilled in this area.

Meaningful instruction in forms and records in the abstract would be difficult to accomplish, but when class members had the responsibility of compiling the actual reports of the principal under the supervision of the school secretary, vitality and meaning were added. Interest and enthusiasm were generated which would have been impossible in a textbook problem.

For this problem area in records and reports, the students were paired to work on the different forms, including the monthly attendance, book, bus, and payroll reports. These responsibilities were rotated among the class members each month so that every student had an opportunity to compile each type of report. Class size for this course during the regular year has been small, usually

five or six students, thereby facilitating the provision of responsible laboratory experiences in administration.

It was not feasible for the students to do the actual bookkeeping.

¹Ben H. Horton, Jr., "A Study of the Problems of Beginning Principals as a Basis for Evaluation and Improvement of the Program for the Preparation of Principals at Appalachian State Teachers College." (Unpublished dissertation, Florida State University, 1957).

Instead the class was required to keep a "second set of books" for a designated period of time.

School bus transportation was another problem area for principals which lent itself to the provision of field experiences. Class members wrote bus route descriptions which were submitted to the superintendent. They participated in and helped plan weekly bus drivers' meetings. Each graduate student was asked to ride a school bus over its daily route in order to gain a better appreciation of the problems of the bus driver. Other field experiences in this area included the supervision of the loading and unloading of the busses.

In connection with class discussion of the problem of attendance, class members worked with the assistant principal who was responsible for attendance at the high school. They became acquainted, at first hand, with the method used in handling absences, class admissions, tardies, and class cuts. As in other administrative areas, class members were asked to make studies of other ways of handling attendance, to evaluate the method in operation, and to make suggestions for improvement. Direct experiences in the handling of attendance problems served as a basis for analyzing causes for absences and for doing further library research in this area. Home visitations in relation to absences were an optional activity in connection with attendance problems.

The principal's rôle in in-service education was another large problem area of the course. Related activities included the attendance of faculty meetings, participation with different faculty study committees, and attendance of principals' meetings.

Probably the most functional and valuable experience provided was in spring registration and schedule-making. This was especially true whenever the course was offered in the spring quarter. This enabled class study and preparation for this problem to be done at the time these activities were taking place in the actual school situation. During the period that the graduate students participated in the high school program, the following procedures in spring registration were used.

Before spring registration, the faculty made a study of its curriculum, its content and purposes. Each department studied its offerings and made recommendations to the general faculty. In this way, the faculty became familiar with every area of the curriculum, enabling them to do a better job in guiding homeroom

pupils in spring registration. The homeroom teachers studied their pupils, and the homeroom periods were used for general and individual guidance in relation to spring registration of courses. In addition, one day was devoted to pupil visitations of all elective courses. A schedule was devised so that students could visit different elective courses, ask questions, and hear an explanation of the scope and purposes of the course. A monthly P.T.A. meeting was coördinated with the spring registration process, and parents had an opportunity to participate more directly and to become better informed in regard to curriculum offerings.

The process of spring registration provided an excellent opportunity for the graduate students to observe and participate in its various phases. In addition, much of the administrative sched-

uling and "leg-work" was done by the graduate students.

After spring registration was completed, class instruction followed in the intricacies of schedule making, including sectioning, room assignments, placement of certain classes and teaching assignments. The construction and purpose of the conflict chart were explained. With this background information, the class assembled the data, devised the conflict chart, and developed the schedule. The class continued to work in pairs, and upon completion, the schedules were analyzed, compared, and the best schedule selected to be used the following year.

When the course was offered during the fall quarter, principles of spring registration and schedule making were discussed, and the class developed a schedule, using the data assembled from the

previous spring.

Other field activities were also included. Class members, on a rotating basis, were responsible for gathering information and preparing the weekly faculty bulletin. Administrative responsibilities and problems relating to special fields were vitalized through conferences with the cafeteria manager, the band director, athletic coaches, and the student council sponsor. Class members sat in on conferences regarding discipline problems. The club program was observed and evaluated. The class worked with the Guidance Counselor and assisted in the Standardized Testing Program.

The class members were asked to keep a diary in which emphasis was to be placed on critical evaluation of their experiences. Their responses to this type of course were rather favorable.

Typical comments were: "This was the real thing." "I feel I will know what it's all about when I take a principal's job." "Very practical." "Real experiences add meaning to the theory being studied."

The primary negative evaluation was that the experience took too much time and not enough credit was given for participation

in the laboratory experiences.

From the viewpoint of the instructor, the course appeared to be an improvement over course work without field experience. It is also strongly believed that such experiences add to the initial self-confidence of a beginning principal because he had already experienced "the real thing" in certain important areas. Furthermore, learning seemed to be more effective and functional when theory and practice were not compartmentalized.

The more valuable experiences provided appeared to be in schedule making, records and reports, and school bus operation. Beginning principals have expressed a need for competencies in these areas, and purely a theoretical approach to these problems

has not proven to be as effective.

In the final analysis, more than in any other instructional process, the quality of this teaching approach depends primarily on the ability and ingenuity of the instructor. This teaching approach, the integration of theory and practice and the provision of guided practice under the supervision of the instructor, will improve as the instructor improves in his ability to make such a principle function more effectively.

LEADERSHIP AS I HAVE SEEN IT THROUGH MY TEACHING EXPERIENCE

LOUISE SEARS

Board of Public Instruction, Broward County, Fort Lauderdale, Florida

My teaching experience ranges from a one-room school situation isolated from any contacts with teachers or other school personnel, through various schools to the present large school system.

Having only one year of college at eighteen years of age, I embarked upon my teaching career. The extent of help or interest shown by the county school staff was a meeting in August for the purpose of giving out supplies for the year. During the eight months of teaching, although I had heard the superintendent did visit schools, no one came. Perhaps in two instances which I can bring so vividly to my mind, this was fortunate for me. It would have been embarrassing had visitors come the day I dismissed the children at twelve o'clock so I could get home in time to see the championship high school football game. Others would have taken a dim view of the picnic which the parents and I arranged and carried out by taking the entire day for this activity.

Looking back, I see so much that could have been accomplished had there been some kind of organization of the county schools. My school belonged to no larger group. A more mature person with more experience and knowledge of teaching and group work would have been

have been very dissatisfied in this isolated school.

On the other hand, a person can be surrounded by teachers and still be as isolated as in a one-teacher rural school. This was the case in the next school which had a four-teacher faculty. The principal taught the fifth and sixth grades which left her no time for administration or supervision. She perceived her duties as a teacher and overseer. This was a stagnant educational environment without concern for what is best for the development of children. My first grade children were struggling with cursive writing. This skill is too difficult for small children so I changed to manuscript. When I left the school, I understand the next teacher reverted to cursive writing.

Organizations or teachers' meetings do not guarantee a structure of communication. The large city school system where I gathered five more years teaching experience had a classroom

teacher organization and a city-wide teachers' meeting once a year. These organizations could not be considered as a county structure linking the classroom with a larger group. They operated apart from the teacher and her classroom.

There was an elementary supervisor whose job, as far as I was concerned, consisted of one visit a year to your classroom to ask the children three questions. He was in poor health and waiting for retirement.

While visiting another school and admiring a mural and several other drawings, I discovered quite by accident that the schools had an art supervisor. (Of course, I had only been in the system two years.) In talking with several teachers it seemed "Miss Lucy" only went to some "favored" schools. Since our school was in the north section, the slums, it was most unlikely she would come. Young teachers hesitated to ask and I continued to wish very much she would come and help me because creativity with brush or crayon was not one of my long suits. "Miss Lucy" never came and I never mustered enough courage to ask. Because of this hesitation of teachers for one reason or another, I have felt so strongly in my present supervisory job that it is important to let every teacher know:

(1) You are interested in her.

(2) Your job is a "helping teacher rôle".

(3) Teachers are encouraged to use all resource people available.

(4) You want teachers to enjoy their work and continue on to a successful career in teaching.

My first principal in the city schools was interested in people not only as they performed in the school situation but also as they went about their daily living.

Everyone respected her for her ability to work with parent, teacher, or principal groups. She was secure in her position, never feeling the necessity to protect it by reluctance to delegate respon-

sibility or share her authority.

The atmosphere of "we" could be felt throughout the faculty. Perhaps a great deal of our "togetherness" was due to the fact that our school was located in a slum area in the city. The school was the center of the community activities. There was a very close Working relationship between teachers and parents. The teachers had a feeling of contributing to the development of the whole child. Because of this particular environment, it was imperative to consider many phases of child growth.

My next principal was a complete reverse. "Miss Sally" was married too late to escape being an old maid.

I was an upsetting element when I came to "her school" and it was just that—"her school". Up to now in my teaching I had really

not had an autocratic principal.

"Miss Sally's" teachers had never questioned her actions or decisions. There were situations where we differed. For instance, I had always encouraged my parents very strongly to attend P.T.A. The telephone had been most effective. "Miss Sally" informed me that this was not done at her school.

In performing her job as a protectorate, her attitude toward parent participation in the school was negative. She sought to keep the parents uninformed and at a safe distance. This was her method

of keeping the canoe steady.

"Miss Sally" was never able to realize that my respect for her

could have grown only as her respect for me would allow.

Her rôle was that of a top sergeant, opening and closing windows, turning on and off lights, adjusting the blinds, or picking up bits of paper while you were attempting to carry on with your teaching.

The second year I moved into another form of resistance, that of remaining silent. Although this indifferent attitude was irritating,

"Miss Sally" could accept it better than verbal resistance. My next six years were spent with a fine educator, who, if she could have shared her authority and responsibility, would have made it possible for many teachers to emerge as leaders. This principal was all the statements and responsibility, we have cipal was admired and revered by the community. She held a place of high esteem because of her long and faithful service. Her faculty respected, admired, and perhaps feared her.

She perceived her rôle as one holding the complete responsibility of the school. It seemed almost as if she stood as a protector against

outside influences.

There was no workable structure within the school organization. At times there were attempts on the part of teachers to meet when there was a specific report to be sent to the county administration.

Since the studies we worked on were required by either the state or county and in that we did not see they would benefit us, our eagerness to work on them was nil.

In her way the principal ran an effective school organization. Rather than being loyal to ideals and beliefs, however, I believe the faculty was loyal to this status person.

As individuals, the teachers did a satisfactory job in the instruc-

tional program. At the same time, it was impossible for them to work as a group.

At this time there was one elementary supervisor who was seen only at county-wide teachers' meetings where she always made a few remarks.

On several occasions I mentioned to my principal that I would like for the supervisor to come and see my children at work in the classroom. Finally, I came to the conclusion that if you were a satisfactory teacher, she felt no need to come to see you. This assumption is so adverse to what I believe. A good teacher is proud of her art of teaching. If one is to hope for the highest productivity, every teacher needs encouragement, recognition, and a sense of achievement.

When I moved to the supervisory staff, I had heard about this man, the elementary supervisor—"You just can't say no". What is it about a person which impels a staff to exert themselves to full capacity?

As you listen to him talk on the phone, or in a group, it is as if you were watching an artist engaged in a scene where every stroke of the brush complements another to make the desired outcome. That is, the result which will be best for all.

How does one get the respect of his fellow workers? The entire atmosphere is arranged in such a way that you do what is needed because you want to do it. How you feel toward a task is more important than the task itself. There are many things which motivate us. We believe that our elementary instructional program stands along side of the best in the state.

Our small staff is very sensitive to the needs of all. There is an

awareness of our responsibility to one another.

In the beginning of initiating the present reading program, the four of us needed each other desperately. Besides working with an experimental program, our job was to establish rapport with the principals and faculties, do a selling job, and at the same time come to some common thinking among ourselves.

These statements by the principals give some insight into the

success of the program:

"We would like very much to go on record as being highly in favor of a continuation of the program in our schools with a possible extension for services for the coming year."

[&]quot;The program has caused the teachers to give more thought to the level on

which each child in her class is reading, and many good practices have been utilized to provide for the individual differences of the students."

"This has been a very successful beginning in the corrective reading program for our county, and I would like to recommend that we have a larger staff in the future."

"I am happy to state that the members of this faculty are very pleased with the corrective reading program attempted this year, and with the teacher."

Caution and care are maintained in selecting personnel for the expansion of our department. The requirement which looms ahead of all is, "Do you get along with people?"

Every new applicant is considered by the principals' committee

and the other members of the staff.

Next week an art supervisor will join us. After the applications were carefully considered, the two most promising candidates met for an informal interview. One had excellent qualifications and valuable experience but my thoughts were, "Can she communicate with the principals?" and "Would the teachers open doors to her?" I saw her as a definite extrovert without too much understanding or sympathy for those who would be lacking art ability.

There was unanimous agreement for the second one. Her years of experience were fewer, her record was not as impressive. One principal put it so well, "She's quiet, but she grows on you."

One does not have to read between the lines to gather that my present job is very satisfying.

Individuals lead with various media:

- (1) Hard Work
- (2) Compassion
- (3) Humility
- (4) Understanding
- (5) Friendliness
- (6) Willingness
- (7) Knowledge
- (8) Respect
- (9) Sensitiveness
- (10) Insight
- (11) Sincerity
- (12) Integrity
- (13) Thoughtfulness

(14) Energy

Few people ever attain the level of being a true leader.

EXPERIENCED ELEMENTARY SCHOOL TEACHERS VIEW STUDENT TEACHING

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How valuable is a required student teaching experience to experienced elementary school teachers? Are some activities more valuable than others? What factors make student teaching for experienced elementary school teachers a productive and successful

experience?

Since some states and colleges require experienced elementary school teachers to take student teaching to meet requirements for certification or graduation, a study was made to answer some of these questions. Questionnaires were sent to all elementary school teachers with at least two years of teaching experience who had taken a required student teaching course during the summer of 1956 at six Illinois teacher education institutions. A total of 115

replies was received.

The typical experienced elementary school teacher, enrolled at one of the six colleges in Illinois during the 1956 summer session, was a woman about forty-three years old. She was employed during the regular year as a teacher of one of the first four grades and had taught about fifteen years. She received eight quarter hours credit for her 1956 summer school student teaching assignment. She was either graduating at the end of that summer session or would finish the requirements for graduation during the next summer session. Furthermore, she had had one previous student teaching experience.

The experienced student teachers were asked to list the activities and experiences they had had during their student teaching that they considered valuable. The experiences and activities they listed were carefully studied and analyzed. The activities reported were those the student teachers found helpful and in which they actually participated. It should be recognized that some student teachers had greater opportunity to participate in experiences they considered valuable than did others. For example, a student teacher working in a stimulating environment with much freedom to participate could report an activity as being valuable whereas another

working in a more restrictive situation would not have the oppor-

tunity to experience or report the same activity.

The seventy-six different student teaching activities, reported as being valuable by the experienced elementary school student teachers, were mentioned a total of 1,028 times. The number of times a specific activity was reported ranged from fifty-one to one, with a median of eleven. The fourteen activities considered most valuable, in order of frequency of mention, were:

- (1) Compiling bibliographies and collecting instructional materials and sources.
 - (2) Preparing and teaching units of study.

(3) Preparing daily lesson plans.

(4) Writing reports to parents or to the schools.

- (5) Conferring with supervising teachers, college coördinators, faculty members, and other student teachers.
 - (6) Arranging for and taking off-campus field trips.

(7) Reviewing, giving, and interpreting tests.

(8) Studying cumulative records.

(9) Participating in parent-teacher conferences.

(10) Attending workshops, conferences, publishers' exhibits, lectures, and other professional meetings.

(11) Giving a play, exhibit, or musical for other rooms and/or

parents and guests.

(12) Observing or participating in pupil-teacher planning of teaching-learning activities.

(13) Developing centers of study around interests of children and planning learning experiences with the children.

(14) Observing individuals or groups of children.

The questionnaire also provided space for the respondents to record general reactions to the student teaching experience. Almost half, or sixty, of the 115 respondents made such comments. Most of the comments were personal reactions and did not go beyond the experiences of the individual person. A few of the experienced student teachers, however, went to great lengths in making detailed constructive criticisms.

The general comments were organized under three headings: (1) those that indicated that student teaching experiences were valuable and ble and worthwhile; (2) those that indicated both positive and negative feelings; and (3) those that indicated the student teaching was worthless or a waste of valuable time and money. There were approximately twenty comments made which fell in each of these three categories.

The student teachers who considered their experience valuable and worthwhile were enthusiastic about almost all the things they did. Many of them were frank to admit that they tried to get out of student teaching, tried to postpone it, and approached it with dread. During and after the experience, however, they found they had gained much of real value. They thought their experiences had been stimulating and saw how they could adapt some of the activities carried on in the laboratory schools to their own classroom situations. Their work in the dramatic and creative arts, their opportunities to observe and assist the supervising teachers of the "special subjects," and the freedom they had to experiment and try different techniques and methods of teaching were appreciated. The opportunities provided for them to help plan their own learning experiences, and the cooperative and friendly attitude of the supervising teacher and other student teachers, apparently had much to do with making the experience a happy one. Although many of these student teachers said they worked hard, they also said they enjoyed every minute of it and learned new things useful to them in their own teaching. They became acquainted with many new and stimulating teaching-learning aids, including textbooks and supplies. Their contacts with laboratory school and college faculty members broadened their outlooks and caused them to think beyond the mere operational level of teaching. In general, the student teachers who were enthusiastic about their experiences had fortunate assignments in terms of physical conditions and mental stimulation.

The student teachers who had both positive and negative feelings about their student teaching experiences generally felt that they learned something and that the experience was valuable, but they learned something and that the experience was valuable, but they did not feel they had learned enough for the amount of time they did not feel they had learned enough for these student teachers they had spent in the classroom. Most of these student teachers were in situations where there were too many student teachers were in situations where there were not enough

Several of the student teachers were rather resentful of having to work in situations where there were more student teachers than to work in situations where the children were either maladjusted or children or where all the children

remedial cases. One student teacher aptly described the feelings of several when she said, "They told us if we didn't get anything out of student teaching it would be our own fault but how could we get much when there were twelve student teachers and only nine children in our classroom?" Being able to work with a "wonderful supervising teacher" often seemed to make up for other shortcomings. Individual and group conferences with the supervising teacher seemed to be particularly helpful to these student teachers. Most of them felt that they learned helpful things during their assignments but at the expense of other learning activities they could not have. Most of these teachers recognized and appreciated the opportunities to develop their sense of self-confidence in their own abilities. Just to feel reassured that possibly the things that they had been doing and that their own efforts to improve their teaching were at least headed in the right direction boosted their morale.

Most of the experienced teachers who felt their student teaching experience was a complete waste of time and effort were quite bitter. About the only value some of them said they received was the necessary credit hours they had earned. Every student teacher who either prefaced or ended his remarks with a statement to the effect that student teaching was a waste of time, recorded at least a few experiences that were helpful. The factors that seemed to contribute to the bitterness were: a supervising teacher that offered no suggestions, made no comments, and held no conferences; teaching assignments that consisted primarily of performing routine chores or running errands; a situation that offered no stimulation and during student teaching they simply "taught as I've always taught"; and student teaching assignments that were unrealistic in terms of number of student teachers, number of children, or scarcity of supplies and physical comforts.

Many of the sixty comments, regardless of whether the general tone was positive or negative, indicated the need for clarification of the purposes of student teaching for experienced elementary school teachers. Many of the respondents indicated they enjoyed their student teaching, thought it was a broadening experience, or felt reassured about their own teaching methods, but still felt slighly cheated in not being able to take home specific ideas or things that would help them in their own jobs. The comments on the returned questionnaires indicated that experienced elementary

school teachers wanted to know what they were to get out of student teaching and then wanted to see specific, concrete efforts made to help them achieve the goals.

Some of the experienced teachers made constructive suggestions for the improvement of student teaching that seemed to be based on careful, objective thinking. Some of their suggestions were:

(1) More time to observe the supervising teacher teach. (Most of the experienced teachers thought their supervising teachers were highly competent and very skillful in teaching children. They felt the experience would be more valuable if they could see the supervising teacher do more of the teaching.)

(2) Greater freedom to visit various laboratory school classrooms and observe other supervising teachers, including the supervising teachers of the "special subjects." (These experienced teachers wanted contacts with many supervising teachers and

many groups of children.)

(3) Ample opportunities to become acquainted with the teaching-learning materials available. (Student teachers felt that the laboratory schools were exceptionally well-equipped and supplied but they needed more time to get acquainted with such materials in other classrooms, in the library, audio-visual centers, and other special laboratories.)

(4) More seminars or discussion group meetings of student teachers and supervising teachers from several rooms. (There was some feeling that maybe some of the most valuable learnings came from one another, and this was a suggestion to provide opportunities and time to share ideas with other student teachers

and supervising teachers.)

(5) Grouping experienced elementary school teachers together in an observation-seminar class. (Such an arrangement would allow for group observations; some participation and teaching;

and more reading, research, and group discussions.)

The 115 experienced elementary school student teachers who participated in this study reported seventy-six different activities they considered valuable. Most of the activities involved direct participation with children in classroom teaching situations since their student teaching assignments were usually of that nature. The factors that seemed most important in contributing to a satisfying student teaching experience were: a friendly, coöperative supervising teacher who gave helpful criticism and supportive

supervision; an assignment to a well-equipped classroom with fairly normal children; a teaching assignment that stimulated creative, non-repetitive teaching opportunities; a realistic student teacher-pupil-supervising teacher ratio; and clearly defined objectives and goals of student teaching. The personal qualities and professional competencies of the supervising teacher were the most important factors in helping to make the experience a rewarding one. The evidence from the study seems to indicate that very careful consideration should be given in planning the activities and placement of experienced elementary school teachers in required student teaching if the experience is to be a rewarding and professionally profitable one to them.

NATIONAL EDUCATION ASSOCIATION PROJECT ON JUVENILE DELINQUENCY: THEORY AND PRACTICE

WILLIAM C. KVARACEUS

Director, NEA Juvenile Delinquency Project1

The National Education Association project on juvenile delinquency represented another major service undertaking as a part of the Association's expanding program. The study ran from September 15, 1958 to June 15, 1959. This project underscored the concern of the teaching profession with the spiralling problem of juvenile delinquency.

The general aim of the project was to help the school administrator and the classroom teacher in the education and rehabilitation of the pre-delinquent and delinquent student. This objective reflects

a reciprocal pupil-teacher welfare concern.

More specifically the purposes of the project were listed as follows:

(1) To define the school's rôle and function in dealing more effectively with the non-conforming, overt-aggressive youngster with particular concern for the extremely difficult cases who jeopardize the education of the class as a whole as well as the welfare and morale of the teacher.

(2) To suggest specific and desirable school practices and adaptations that will help prevent and control delinquent tendencies and which are based on firm theoretical concepts determined from a distillation of research-anchored theory as found in the various disciplines.

(3) To enable the school to do a better job of early identification of the potential delinquent so that preventive measures can

be taken in school and community.

(4) To indicate how the school may cooperate in an all-out community effort designed to reduce inimical delinquency-producing factors and to replace them with positive forces.

(5) To indicate how the school can be more articulate in its

On leave from Boston University, 1958-9.

effort to inform the public and to enjoy popular support of its

program of prevention and correction.

In view of the complexity of the delinquency phenomenon, the limitations of time and funds available to the project, and the all-community involvement in the prevention and control of juvenile delinquency, the NEA project was delimited to the above goals as practical and reasonable objectives. At the same time, care was taken lest the project infer, for the school agency, responsibilities beyond its original and unique functions, or imply that delinquency was mainly the problem of this one community resource.

Phase One of the Project attempted to establish and to state a sound theoretical concept or rationale concerning the meaning of delinquency as an aspect of adjustive behavior in school and society on which to structure preventive and corrective school action. This statement comprised a distillation of the best thought as to the definition of delinquency including causative aspects as seen in the interaction of personality and environmental forces using an interdisciplinary approach. A carefully selected team of experts who embody broad interdisciplinary experiences with the delinquent prepared the brief but comprehensive theoretical statement,² which was subsequently circulated for comment and agreement through a wider circle of delinquency experts representing different fields in the behavioral sciences.

Phase Two of the Project involved the determination by professional educators of desirable school practices and adaptations that stem as implications from the orientation in the theoretical concept statement, "Basic Document I." To suggest action programs or practical approaches without any frame of reference to research and theory can easily result in "impractical-practical" programs which may actually be irrelevant to the delinquency phenomenon. Action-implications were sought under such headings as space, personnel, curriculum, special services, and liaison responsibilities—it

bilities with community agencies.

A number of regional conferences were held with selected school personnel who have been active in research or in servicing the pre-delinquent and the delinquent. Basic Document I was made

² Delinquent Behavior: Culture and the Individual. Washington, D. C., National Education Association, 1959, pp. 147.

available to the conferees prior to each meeting which was run on a workshop basis aimed to identify desirable school adaptations and practices.

Workshop sessions were conducted at annual meetings of such groups as Council for Exceptional Children, Association for Supervision and Curriculum Development, National Association of School Administrators, Classroom Teachers, Department of Sec-

ondary School Principals.

Phase Three of the Project provided descriptions of school-community programs exemplifying many of the promising adaptations for prevention and control of juvenile delinquency. This phase of the project aimed to locate, to describe and to illustrate a number of specific school programs which have in the past years succeeded in denting the delinquency problem. At the same time, insights were provided as to "how they got that way." This involved questions pertaining to community understanding and support of such programs.

A systematic search for school-community programs for delinquency prevention and control had been made by writing to all state school offices and executive secretaries of state education associations. At the same time, a careful check of the delinquency literature was made to locate school programs that have attempted to help the teacher and delinquent. The officials in these centers were invited to submit descriptions of their programs with any

other pertinent material.

Phase Four of the Project was a National Invitational Conference on Implementation of Theory, held in Washington on May 14 and 15, 1959. The purpose of this conference was to consider a summary of the first three phases and to deliberate upon ways of implementation of desirable practices for delinquency prevention and control at the local level. The core group included school personnel drawn from representatives of NEA departments; practitioners in the field; classroom teachers; school administrators and supervisors; special education personnel; teacher training specialists; physical education, health and recreation workers; counselors; lay representatives from PTA membership, Asociations of School Boards, representatives of various private agencies and organizations such as National Probation and Parole Association, Association of Police Chiefs, Juvenile Court Judges, Association for Psychiatric Treatment of Offenders; Family Service Association of America; representatives of the National Institute of Mental Health, United States Office of Education, and Juvenile Delinquency Services Section of the United States Children's Bureau.

As a product of these last three steps a second document³ was published. This volume presented basic principles, specific guidelines illustrations of recommended school practices that were most relevant to delinquency prevention and control.

The NEA Juvenile Delinquency Project through these two publications exemplified the scientific method and tried to close the gap

and take in the slack between theory and practice.

^a Delinquent Behavior: Principles and Practices. Washington, D. C., National Education Association, 1959, pp. 350.

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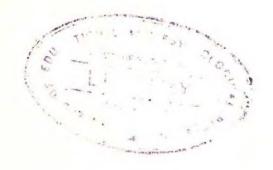
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